

United States  
Circuit Court of Appeals  
For the Ninth Circuit.

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Transcript of Record.  
(IN TWO VOLUMES)

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THE WASHINGTON WATER POWER COMPANY, a Corporation,

Appellant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WANNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho, and His Successor and Successors,

Appellees.

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VOLUME II.  
(Pages 375 to 677, Inclusive.)

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Upon Appeal from the United States District Court  
for the District of Idaho, Northern Division.



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**[Testimony of J. W. Mackey, for Plaintiff.]**

J. W. MACKEY was called and sworn on behalf of the plaintiff and on

Direct Examination.

(By Mr. GRAY.)

My name is J. W. Mackey; residence, Spokane; head bookkeeper of the light and power accounts of the Washington Water Power Company. I have been working for them in that capacity 12 years in July. I have had charge of the consumers' ledgers for the Idaho business from Post Falls. I have charge of all those books, and have gone carefully into them for the [340—56] purpose of determining the gross revenue from all sources in Idaho from the plant in each of those years; for the year 1908 the total gross revenue in Idaho was \$259,851.73; for the year 1909, \$246,332.13; for the year 1910, \$283,020.02. On

Cross-examination.

(By Mr. ELDER.)

There are about 56 accounts showing the different parties in Shoshone County furnished power during the year 1908, and the rate charged to each party. No. 1 is based on a 400 minimum K.W.; the minimum charge is \$1199.70 a month, with a minimum consumption of 156,600 kilowatt hours. The excess over and above that amount is figured at .0112 per kilowatt hour. The bill is figured on the basis of kilo-volt ampere. No. 2 is the same rate. The K. W. hours are furnished by the superintendent of light and power, furnished to me, as bookkeeper. I

(Testimony of J. W. Mackey.)

figured those from the kilowatt hours, and the K. V. A.'s furnished by that department. I took the total amount of power as furnished to me by the company and figured out the rate, and got the amount. I can give you the amount, but I would have to figure it up; there are 54 accounts and there are 12 items to every account, in K. W. hours. The rate is not the same for all those different parties, everything showing the transaction is in this book; the book shows the rate; I will take that book and go over it with you during the noon hour. Our contracts in Shoshone County for power provide in each instance a minimum charge. The average rate charged on the K. W. hour is figured at 0077 and 0076. I have not on our books any charge for sale of power to H. M. Strathern or to Mr. Martin. I was not present at court when Mr. Fiskien testified. If there was 1,106,181 K. W. hours [341—57] delivered to Mr. Strathern in 1908, I have not on my books any record of that, or any credit to this plant for that power, and if there was 246,415 K. W. hours delivered to Mr. Martin, I have no charge against him for that amount. There were no credits allowed this plant on our books for any delivery of electricity to any person outside of the State. It simply pretends to credit or charge persons or customers in the State of Idaho, where we delivered them power from the Post Falls plant. I can get the amount of charge in K. W. hours from the superintendent of the electric power department, from one of his offices. I do not know where that power was

(Testimony of J. W. Mackey.)

delivered from. I know because I asked the superintendent of the company and he told these items were delivered at Post Falls to the separate consumers. I do not know that of my own knowledge. My records are made up from figures compiled by the superintendent's office and sent to me to be calculated. I do not know what they generate at Post Falls. I am not an electrical engineer; I know nothing about that. The same is true in regard to the gross receipts for 1909 and 1910; the rates charged in 1909, they changed when the contracts expired,—and a portion changed in 1908 as I showed you on the ledger, with several consumers; when the contracts expired. I did not figure the minimum on the new rate.

Redirect Examination.

(By Mr. GRAY.)

The book I have here is the customer's ledger, individual customers in the State of Idaho; that represents the charges that were made and the collections made from our customers in Idaho. I have separate on those amounts the distribution [342—58] during those years, gross receipts, between the Coeur d'Alene's and Spokane & Coeur d'Alene Railway, and the other items. In 1908 the mines was \$237,209.72; Kootenai Power Company, \$1,593.51; Coeur d'Alene Railway, \$21,048.50; for the year 1909 the mines was \$218,897.31; Kootenai Power Company, \$1,631.74; Coeur d'Alene Railway, \$25,803.08; 1910, mines, \$252,092.25; Kootenai Power Company \$1,678.39; Coeur d'Alene Railway, \$29,249.38. The

(Testimony of J. W. Mackey.)

minimum charge to the Spokane & Coeur d'Alene Railway for 700 horse-power was \$1,116.66, which was \$20 per horse-power per annum. I cannot give that to you per K. W. hour.

Cross-examination.

(By Mr. ELDER.)

In these items of 1910 I have given, that is the total amount of power delivered in Idaho, the same as 1908 and 1909. I got the figures from the ledgers from the same department. I got the other figures from the superintendent's department. I do not know of my own knowledge whether those figures were correct. I have the book of original entries as furnished by the superintendent's department; I haven't that here. Mr. Fisker is in charge of the superintendent's department.

Redirect Examination.

(By Mr. GRAY.)

Those figures are copies from the meter readings into the book made contemporaneous with the furnishing of that information by Mr. Fisker.

**[Testimony of C. F. Uhden, for Plaintiff (Recalled—Cross-examination).]**

C. F. UHDEN was recalled and testified as follows, on

Cross-examination.

(By Mr. ELDER.) [343—59]

The lay of the land and the location of the channels was acquired by us with the purchase of the Post Falls property. There had been a survey and

(Testimony of C. F. Uhden.)

plans drawn for a plant at that place. I said our company got all the information they desired in a few days there; the reason for that was that we had acquired plans and specifications from someone else; those plans and specifications were turned over to us at the time the purchase of the property was made; as to whether there was any particular value place on them I could not say; I know of no promotion charges being made; I will be unable to give the total amount that was expended by the company in their preliminary work after they acquired the land, for the simple reason that we started the work on the different channels at different times, and while the engineers were working on one channel they were taking such notes as we required at the office at times for the other channels. To start with, we had very little—there was very little engineering necessary. The amount that was expended by the company for preliminary engineering and survey cannot be obtained.

**[Testimony of D. L. Huntington, for Plaintiff.]**

D. L. HUNTINGTON was called as a witness on behalf of plaintiff and testified as follows, on

Direct Examination.

(By Mr. GRAY.)

My name is D. L. Huntington; residence, Spokane; I am president of the Washington Water Power Company, and have been connected with the company nearly 18 years, first as treasurer, afterwards as general manager and secretary, then as



(Testimony of D. L. Huntington.)

second vice-president and general manager, first vice-president and general [344—60] manager, and president. I am an electrical engineer. I was educated at the Sheffield Scientific school of Yale University; then I was a year in the shops of the General Electric Company; then the Thompson-Houston Company; then I was assistant engineer in the Philadelphia office of the General Electric Company for several years; then I came to Spokane. My subsequent experience has been with the Washington Water Power Company; in the course of that experience I have had charge of the property of the company there during a large part of the time I have mentioned. The figure which we assumed in the value of the power which is shipped from Post Falls to Spokane and credited to the Post Falls plant was .6 of a cent per kilowatt hour. I think that is a fair price to charge the company with and credit the Idaho property with; I think it is higher than it might be considered, but in order to be on the safe side we considered it .6 of a cent per K. W. hour.

At Post Falls we sell certain power to the Coeur d'Alēne & Spokane Railway Company, or the Inland Empire Company; that power figures a little over .5 of a cent per K. W. hour. I will explain to the Court why I have not taken .7 of a cent per K. W. hour and have taken .6 of a cent for power delivered to the mines in Shoshone and in charging the company and crediting the property with the power taken to Spokane, by saying, we have assumed that there was practically no expense of transmission and

(Testimony of D. L. Huntington.)

distribution, such as there is in the other work in Shoshone County, and so on, and have only figured against it the cost of line losses to Spokane, and the cost of conversion, when we figured the price we got out of it. We found the price was a little higher than what we were charging other large customers for power, and that was the [345—61] basis upon which we made the prices. There is no cost of distribution figured in this particular amount; that was why we figured it as low as that. Mr. Strathern, as you mention is, is the Post Falls Lumber & Mfg. Co. Then there was the Martin matter, which I think was in Martin's name; when we first started in developing power at Post Falls the people from whom we purchased the property there did not own all the water rights at Post Falls. Mr. Strathern or his successors had purchased, prior to our purchase, portions of this property, which we needed for the construction of our dams in North Channel, and we made an arrangement with Mr. Strathern whereby he was to transfer to us the land which we required and his water rights, and in return we were to give him a right in perpetuity to an agreed amount of horse-power delivered at the Post Falls plant, and in addition to that we were to pay the cost of moving his saw-mill, which occupied the ground, to the site upon which he afterwards built it. There was to be no charge made against him for the power. In other words, we simply gave him electric power in lieu of the water-power which he owned, and paid the cost of moving his mill to where it could be oper-

(Testimony of D. L. Huntington.)

ated in the new location.

Strathern got 250 horse-power, that is, at Post Falls, the Post Falls Lumber & Mfg. Co., and Martin 125. I think there were two contracts on that Martin business. I think Alice Martin owned part and some other Martin in the same family owned part, but the total of the two was 125 horse-power. The Martin transaction was of a family nature; they were part owners, just as Strathern was, and we gave them a right in perpetuity to that amount of power. There are no [346—62] charges at all against them. We had to pay them in addition to the power, we paid them \$1500. Whether that all went to Martin or Alice Martin, I don't know. Such power as has been delivered to them during the years 1908, 1909 and 1910, is power delivered under those contracts, for which we received no compensation.

The cost of maintaining a plant or machinery of any kind is never indicated by the exact particular expenditure of any particular year. A machine may be gradually becoming in need of repair and no expenditure made on it for several years; then there may be a very material amount to be expended for repairs, and if, for instance, the first three years of the operation of the plant it continued to wear and become gradually in need of repair, if you followed the plan of only considering the expenses that you actually met in that year, you would arrive at the conclusion that there were no expenses of maintaining a particular machine or plant, whereas, as a matter of fact, you are accumulating a maintenance that



(Testimony of D. L. Huntington.)

has got to be paid perhaps the next month or the next year. That is the reason why I think the determination of the costs of maintaining a plant should take a period of time of sufficient length to determine what the average cost of maintaining is.

I mean by the life of a plant in taking any particular piece of machinery or apparatus, that time which elapses before it should, for various reasons, be replaced. I think in determining the maintenance the average life should be taken for the life before the machine will have to be displaced and replaced. Depreciation is a fund which should be set aside for the replacement of apparatus which has [347—63] become useless for the reason that it is either worn out or inadequate or obsolete, for the purpose for which it is to be used, and such fund would be in addition to the expenditures which would be made from time to time to maintain the machine, in the sense of maintenance, during its life. With reference to the dams of the company at Post Falls and including within that the fixtures which are attached to the dams, the gates, and all of the apparatus connected with the dams, 2%, in my judgment is a fair per cent to be allowed and charged against the revenue per annum for depreciation on the original cost of construction. I take the original cost because I think that on structures of the kinds—dams of the kinds we are figuring on, it wouldn't be a safe proposal to figure that more than 50 years of use is ahead of us for those dams. The dams might last through a period longer than 50 years, but they might

(Testimony of D. L. Huntington.)

be inadequate or obsolete, or not fitted to the use at that time. There would be certain portions of the sum which would have to be set aside to take care of their actual disintegration, etc., but I don't feel that it is safe for us to carry,—or look into the future beyond 50 years, because of the change in the art, and the possibilities, and in view of the probability that at the end of that time it will be inadequate, or be replaced by some new method of producing power, or some other unforeseen invention or means of arriving at the same end.

I have allowed 3 per cent depreciation for the buildings for the same reason I have given; for the machinery at Post Falls I have allowed 5 per cent, figuring a lifetime of 20 years. The reason I have chosen a larger figure than on the others is that the machinery in a plant is the portion which [348—64] most quickly becomes obsolete. Most of the replacements of machinery to-day in power plants are for the reason that they are obsolete, rather than that they are worn out. With reference to the transmission lines I figured 8 per cent for depreciation on the whole structure, based upon my experience and acquaintance with the science I believe that to be a reasonable sum. There is a question in my mind whether that is high enough. The machinery in the substations in Shoshone County I should say ought to be figured at about 10 per cent; the buildings are of a comparatively cheap class, and I should think possibly might be figured at 5 per cent. 5 per cent for the entire item in my opinion would not be high

(Testimony of D. L. Huntington.)

enough. That class of apparatus is almost sure to be replaced within ten years; practically everything we have had of that kind has had to be replaced within ten years, because of obsolescence or inadequacy. I did some figuring to see what would be a reasonable sum for maintenance and general office expenses to be charged against the revenues of that plant per annum, and assuming that it were operated as a separate property, I figured in the neighborhood of between \$21,000 and \$22,000 per annum. I have my details of that if you want it. Those figures were passed upon taking the Idaho business of the company and figuring on it as though it were run as a separate business. 5 per cent would not be excessive depreciation upon the machinery of the building near Cataldo. I think the apparatus ought to be charged off at about 10 per cent, and the building at about 5 per cent. There isn't any class of apparatus we have that has to be replaced as frequently and as quickly as our switching apparatus. [349—65]

I am familiar generally with the customers, and the class of the business which we serve from Post Falls. The principal part of our business is supplying power for mines. From the standpoint of an electrical engineer and my acquaintance generally with the business, we consider it a relatively hazardous business. There are several power sites within a reasonable distance to the mining district which we serve, either lying idle or in the course of development, from which competition might be expected. There are several other power sites. The nearest

(Testimony of D. L. Huntington.)

large water power is Thompson Falls, about 35 miles east of Wallace; that is in the course of construction now; there is another large power in Kootenai River, at Kootenai Falls. There are a considerable number of powers of fair size along the St. Joe River to the south and west of Wallace. There are also water powers in the State of Washington near the Idaho line, to the north of us.

Mr. MacCalla's position in the years 1905 and 1906 was assistant to the general manager, I think. Mr. MacCalla came to the company in 1903 at \$250 a month,—as I remember \$3,000 a year, and I don't remember exactly, but we raised him pretty steadily year after year. I imagine it must have been in the neighborhood of \$5,000.00 during the construction of this plant.

The first portion of the lands surrounding the Post Falls plant and were purchased from R. K. Neal and associates; Mr. John Finch was the principal associate, Mr. A. B. Campbell of Wallace had some interest. I think White and Bender each had a little interest. I always understood them to be [350—66] men of means. At the time that was sold to the company there was delivered to the company engineering plans and surveys showing the contours made by B. C. Riblett, and they were turned over to us for the consideration paid for the property; that is, they went with the purchase. Mr. Riblett is a well-known engineer in Spokane, and was at that time. Those plans were in considerable detail; the purchase price covered the plans. Mr. Riblett has

(Testimony of D. L. Huntington.)

not during my time been connected in any way with the company. Beginning in somewhere in the early '90's, he did some work for the Spokane Street Railway—I am not positive about that—in surveying and laying out tracts in and about Spokane. I was familiar with the fact at the time we purchased the property that he was an engineer of standing and accomplishment. In my judgment, based upon my acquaintance and experience with the character of the business which we serve from the Post Falls plant, my general acquaintance with the country surrounding that plant, and the resources of it, we should earn at least 10 per cent as a fair return upon that investment, that is, not over depreciation. Absolutely net return on money invested. It is, I think, ordinarily conceded that in the business of supplying electric light and power in ordinary communities, cities of fair size, and so on, and doing a business of that kind, that a return of eight per cent is a moderate, a reasonable, rate, and we feel that the hazard of the business in the Coeur d'Alene's, where we are so at the mercy of the possibility of failures of large customers, mines playing out, changes of price of lead, and the tariff, and considerations of that kind, that the business is relatively hazardous, and that we should receive a higher rate than on an ordinary investment, and we [351—67] also believe that, for the reason that investments in other kinds of securities in this community are, relatively speaking, eight per cent and up, for good mortgages and investments of that character, we feel that this is a



(Testimony of D. L. Huntington.)

much more risky business than that, and therefore we think we are entitled to a return materially greater than the ordinary going rate for mortgages and so forth in the community.

In figuring depreciation I took the original cost. I figured straight line depreciation, that is, not compounded. I figured that, roughly speaking, the life should be divided into a definite number of years, and that the property should be figured as depreciating that much—that proportionate amount each year.

Cross-examination.

(By Mr. ELDER.)

I have some notes showing the amount of power delivered to Spokane from the Post Falls plant during the year 1908; it amounted to 8,532,000 K. W. hours after taking out the loss of transmission. I figured the loss at 10 per cent; that is the basis the .6 of a cent should be based upon, the amount which was delivered to be used in Spokane after the deduction of the losses. The loss is not only a transmission but also of conversion to the form of energy in which we sold it at Spokane.

We started that year at Post Falls with 9,480,000 K. W. hours, the memorandum that I have, and we actually figured sold 6,399,000; that is figured at six-tenths of a cent per K. W. hour. I cannot give you the company's net profit on that last amount. I don't believe I could determine that from our books. This power that was generated at Post Falls and [352—68] delivered to the company in Spokane was sold in Spokane at the switchboard. When we speak of

(Testimony of D. L. Huntington.)

distribution we mean carried from our power plant to the places of the customers, we furnishing the investment necessary to distribute, and what I mean is that we had no distribution expense whatever. I mean by sold at the switchboard is that we have had no distribution expenses whatever; in other words, it was wholesale to the customer at our station switchboard, where the conversation was made. This power was delivered and turned on to the bus-board at Spokane with our other power; a part of that power might have been used for local customers.

What we have endeavored to do here is this: After the power goes to our bus-bars at Spokane and is started to be distributed to customers, it becomes involved in the question of price and cost with the matter of distribution in Spokane, which, in some cases is fairly cheap, and in other cases is very expensive, and in order to determine the price at which that is sold to other customers, it becomes an exceedingly complicated matter as to how much should be added to the raw price, so to speak, of the power for this very complicated distribution system, which is not only complicated, but is so different for different uses. Therefore, what I have endeavored to do is to give a price for the power undistributed, and keeping out of it the elements of distribution, in order to give some reasonable idea of what it was worth at Post Falls. That is about as far as I can tell you about the distribution of it. I would be morally certain that the Washington Water Power Company did not make a net profit which

(Testimony of D. L. Huntington.)

would amount to more than .6 of a cent per K. W. [353—69] hour to the power delivered to the company. I don't know what profit we made, I can't tell you that, but I am morally certain that it was no such figure as that. We would be very fortunate if we could get a very small fraction of that. I do not think it is a fact that we make more on the power delivered at Spokane from the Post Falls plant than the amount allowed .6 of a cent. From our records in Spokane I don't think I can determine approximately the amount earned by the Washington Water Power Company on the power delivered in Spokane from the Post Falls plant. I think possibly I can determine the proportion of power which we distributed in Spokane delivered from that plant. I can determine our total earnings in Spokane, but cannot determine the proportion that is due to the Post Falls plant because there are a great many other elements that have to be added to it before you come anywhere near it. For instance, we deducted 10 per cent for line losses and 25 per cent for loss in converting and placing with the other power; it is not then ready for delivery to our customers, because it has got all the distribution features to be put on after that. We have an immense investment for distribution and a very exceedingly complicated one, with different classes of business, some of them connected with the same conductors, some on dissimilar conductors, some at high voltage, some of it low voltage, some on overhead distribution, and some on underground distribution, which is exceedingly complicated. It is a



(Testimony of D. L. Huntington.)

fact in determining the net earnings that all the cost have been deducted. I can't determine the proportion that is due the Post Falls plant, for the reason that it is [354—70] so complicated that I don't think we can get at the result; we have tried it a good many times; we think the transmission loss is about 10 per cent; we believe we actually lose that much, we don't know. I know how much power is generated at Post Falls and how much is delivered at Spokane; part of it goes into other distribution systems connected between the two; the two into the Palouse country and Big Bend; that it goes into the Palouse country and the Big Bend country does not mean that it is credited to the Post Falls plant, it may come from Post Falls or Spokane, and usually goes to Spokane before it is delivered. I cannot tell the exact amount because it isn't a sufficiently exact science to do it. We can estimate it, and we believe we come pretty close to it, but the network of the system is so complicated, and so interconnected with one plant and another, and one transmission line and another, that we don't get an accurate account of it. We deduct for transmission loss to Shoshone County about 10 per cent, which is too little; as a matter of fact, the losses up there are greater than that. I should say the losses are greater on the Shoshone County, and if we are transmitting on what we call our No. 1 line they are greater yet; if we are transmitting on our No. 2 line they are smaller than on the No. 1 line, but I should think 10 per cent was certainly a moderate estimate.

(Testimony of D. L. Huntington.)

The amount delivered to Spokane in 1909 on the same basis we have been talking about, at which we figured the six-tenth of a cent was ten million, seven hundred off thousand K. W. hours. I cannot determine from our records the amount that was owned by the company on the power that was delivered from Post Falls that year. I wish I could. The amount for 1910 [355—71] was twelve million two hundred odd thousand K. W. hours. The amounts I gave for 1909 and 1910 are the amounts figured at .6 of a cent, after we had deducted the line losses and conversion losses.

I said we have contracts with Mr. Strathern to deliver to him practically 250 horse-power. I know what he gets for the power. I suppose that is the best evidence of what it is worth. He gets \$16 a horse-power a year for it. To get at the market value of his right, you will have to take what his income is from it, and capitalize it at some sum, say ten per cent, and then discount it pretty heavily, for what one would pay for it would probably be less than that. We didn't consider that property from a value standpoint at all when we purchased; we figured that we were giving him all that we got, so far as power was concerned. It was all one transaction and we simply put into two contracts. There was not a total value placed on the property; the amount we paid Mr. Martin and Mr. Strathern was in consideration of the cost of moving their apparatus from the place where it was to a new place. It wasn't a consideration for the power. We felt then, and feel

(Testimony of D. L. Huntington.)

now, that we gave them back all we got; that we were absolutely no net gainers as to the amount of power.

We did not enter into a contract with the Cable Milling Company; we did not agree to deliver them any power, nor with any other person in Idaho in connection with the Post Falls plant. We paid an amount for moving the mill, \$15,000, that is included in the \$109,000. We paid Mr. Martin \$1500, and that is included in the \$109,000. I am of the opinion that maintenance should be figured on a number of [356—72] years. I don't agree that the best way to arrive at the actual value of that plant at the present time is to determine the amount which we have expended there in maintenance, and the amount we have expended on the original cost by our books. If I were going to buy that plant, I wouldn't want to know just what it happened to cost to maintain the plant last year. I would want to know what it was going to cost me to maintain it after I owned it. Maintenance is that expenditure which goes to keep a machine or apparatus or building in reasonable repair, that is, in serviceable repair. It will not ordinarily keep a machine from becoming obsolete, but it keeps it in service for the kind of service for which it was originally intended. Depreciation, on the other hand, is an allowance which takes care of those things which are over and above the question of keeping in ordinary repair. For instance, obsolescence—A machine may be kept in good running repair throughout its whole life, and yet by the end of its life it may be utterly obsolete and of no use for the

(Testimony of D. L. Huntington.)

purpose for which it is intended. Maintenance doesn't take care of such charge, therefore it has to be charged to depreciation. We have a sinking fund only in the sense of accounting for it. The amounts set aside are reinvested in the property. We have a sinking fund for another purpose, but that is separate thing. The sinking fund does not take care of depreciation I last referred to. I think it should be properly called a sinking fund, but the funds are invested in the property, and not in outside securities. Under our system the fund is suppose to take care of the value of that machinery within 20 years, if it is a 5 per cent depreciation. The purpose of the sinking fund is to take care of the depreciation, and then [357—73] we reinvest that money in other parts of our plant, for instance, if we set aside \$350,000 for depreciation, we don't actually take that money out or put it in the bank or invest it in securities, but if next year we are going to build a pole line into Bonner County, we may use that money to build that line.

I said I thought the dam would probably be inadequate or obsolescent within 50 years, that I didn't think it was a reasonable thing for us to assume that it would not be, and that some other form of dam or other form of machinery,—I don't remember my exact words,—should be provided for within a period of 50 years. I think this part of the business is quite hazardous; the fact is that we are at the present time building a larger plant than the one at Post Falls, but not the one for this district, we don't expect to

(Testimony of D. L. Huntington.)

serve this district with it. We have the Post Falls plant, Spokane plant, the Little Falls plant and the steam power plant at Spokane, and we have another much larger plant in construction at Long Lake. All of the plants except Post Falls are in Washington.

There are a number of reasons why I consider the business hazardous. Our business being practically all, or very largely, with mining companies, is with a character of customers who may run out of ore, the mines be discontinued, leaving you with the investment on your hands. We have had a number of such cases. They may become insolvent and fail to pay their bills, of which we have a number of cases. We consider that we are doing business with people who are largely in a speculative business, and therefore any business which we might get from them is naturally speculative, and therefore hazardous. I [358—74] can illustrate that with actual cases of our experience in the Coeur d'Alenes, if you want them, a whole lot of them.

In some cases the business developing hydraulic water power is considered a safe and good business; in some it isn't. There have been a great many serious failures of large water companies in this country. I can name a lot of them. The Southern Colorado Power Company is one of very large size which has been practically a total failure. The large development at Massena, New York, is an old state, with large population, is an absolute failure. I know the reason of the failure of the Central Colorado Power Company. In that case they had



(Testimony of D. L. Huntington.)

absolutely inadequate knowledge of the cost of developing the power, and they provided inadequately in the amount of money originally. They found afterwards that they would have to put a great deal more money into it to complete the enterprise, and when they had done that they found the business was not sufficient to pay a return on the money invested, although it might have paid on the amount originally contemplated. The class of customers, I think, was practically mining business, the Cripple Creek district.

I consider that the company is entitled to an earning of ten per cent. The money with which the company was bonded cost more than that because that is the net bond rate. The bonds are not sold at par; sold at 94. I think it is a fact that our power load in the Coeur d'Alene mining district has been steadily increasing in the last number of years. There has been fluctuations in income—some years less and some more, but I think the actual amount of power sold has increased [359—75] year by year, but with a downward scale of results per kilowatt hour.

Being questioned by the Court, witness further testified: Six-tenths of a cent per kilowatt hour would be a reasonable allowance for the power we take to Spokane; it is more than we are getting from the Inland Empire people. We are getting from them five-tenths of a cent, and we are putting this at six-tenths of a cent. We are allowing about 20 per cent more here than we are actually getting. We don't

(Testimony of D. L. Huntington.)

sell to the Inland Empire company on the rate per K. W. hour; our contract was made in another way, on the basis of so much per horse-power per annum, but in dividing the rate by the number of hours we sell them we are able to get at the figure per K. W. hour. It is .5002, I think. Also in our business in Spokane we own a street railway and we make a close charge on our books in order that we may know whether our street railway pays or not, and we make a close charge there of 6 of a cent per K. W. hour, as nearly as I remember. That is another reason why we chose this figure. We sell to the Inland Empire Railway at .5¢; that is sold in Spokane; it is what is called the Spokane Traction Company, but it is part of the Inland Empire Company. We deliver part of the power to them at Post Falls and part of the power we deliver at Spokane. For the power in Idaho there should be no deduction for losses for that portion sold to them at the Post Falls plant, because it is delivered right to them; there are no losses of transmission or conversion. But that portion which we take to Spokane and sell to them there, we sell a great deal more than is covered by this—that is converted there and sold to them at our station switchboard at Spokane. The charges are lumped. [360—76] It isn't a fair arrangement, and it is one that we had a great deal of difficulty in clearing up.

On examination by Mr. WERNETTE, witness continued: They have a minimum total contract, that they shall not take less than a certain amount, but

(Testimony of D. L. Huntington.)

it is not in a sense of a standby, but it is simply that they are allowed to have so many horse-power, and they agree to pay a minimum of so many dollars per annum, whether they use it or not. As a matter of fact, they do use it up to the limit, and supply the balance themselves. Our conditions with them are somewhat different than it is with private consumers. With retail customers it is very common to have stand-by charge collected.

#### Redirect Examination.

(By Mr. GRAY.)

It is comparatively simple, how we get at the amount of power that we credit the Post Falls plant with as going to Spokane, because we have meters at Post Falls which measure the total output, and we also have meters which measure the amount that goes out on the Spokane transmission lines; then the network begins, and from there on it is very difficult.

There was sold in Idaho during the year 1908, 30,918,397 K. W. hours, leaving an excess at the switchboard of 9,480,603 K. W. hours; in other words, we have charged to ourselves all of the excess over what was sold in Idaho, whether we sell it or not, no matter what is done with it we give them the credit for it on this computation. Even though, as a matter of fact, we might have an excess of power at Spokane and not use it, that plant is credited with all the excess over what is actually sold in Idaho, and that has been true during each of these years. The company has a material excess over the [361—77] demand in Spokane.



(Testimony of D. L. Huntington.)

Recross-examination.

(By Mr. ELDER.)

(Witness testified :) We are building a new power plant just below Spokane for future possibilities; it is to be completed some time in 1915. 746 K. W. hours represents a horse-power hour. There are 8,760 hours in a year, and by multiplying that by one kilowatt it will give you the number of kilowatt hours which one kilowatt hour produces in a year. In other words, one kilowatt of capacity will produce, if operated continuously, for one year 8,760 kilowatt hours. A horse-power is about three-fourths of a kilowatt hour; that is, 746 K. W. hours per horse-power. One K. W. hour would be about one and a third horse-power hours, or a horse-power hour would be about three-fourths of a K. W. hour, and if a K. W. hour produced 8,760 K. W. hours in a year, if you want to know the number of horse-power hours, that would be to divide it by .746.

Thereupon the plaintiff produced tax receipts of Shoshone county showing payment of taxes by the plaintiff to that county for the year 1908; the property in Shoshone county taxes in the sum of \$1664.00; for the year 1909 taxes in the sum of \$2,875.04; for the year 1910, taxes in the sum of \$3,211.00; tax receipts showing payment of taxes to Kootenai county, Idaho, for the year 1908, \$10,429.78; 1909, \$26,880.69; 1910, \$39,693.42; power lines in Kootenai county on which taxes were paid, \$183,000.

[**Testimony of John B. Fiskén, for Plaintiff  
(Recalled).**]

JOHN B. FISKÉN was recalled to the stand and testified as follows: [362—78]

Direct Examination.

(By Mr. GRAY.)

Since I went off the stand this afternoon I have taken the records of my department, for the purpose of checking—of determining the maintenance cost on the property at Post Falls during the years 1911 and 1910. The books are all here. With reference to maintenance my duties are to make requisitions on the supply department for material required, and to make returns of the time spent by the men working on maintenance work. We keep a record of the time for the expenditures for maintenance in my department, not of the supplies; that is kept in the auditing department; the transfer ledger is where those items are brought together. I am familiar with the system of bookkeeping used for the purpose of keeping track of the maintenance items. I have had six years' experience in bookkeeping. I have gone over the transfer ledger myself at different times on various occasions. I am the person responsible in that company for the amount which is expended for maintenance. I have examined those books since the adjournment of court this afternoon. I have here a statement of the amounts expended for maintenance as shown by the records of the company, during the year 1910, on that project. I know of my own knowledge that these are the only books

(Testimony of John B. Fiskén.)

that are necessary to arrive at the cost (transfer ledger and work order ledger). I find in the amount for maintenance of water-wheels and governors there is a mistake of two cents, as compared with the figures heretofore given, compiled by the men working under me. In dams and flumes I find a discrepancy of \$170.20, and I would like to explain that the dams and flumes maintenance are all charged to one account [363—79] covering all the dams and flumes of the company, and in order to state the amount for Post Falls, it is necessary to go through all the various items and separate them. This discrepancy of \$170.20 I might be able to find with further time, but so far I haven't been able to find it. This \$170.20 I find to be less than in the statement I read this afternoon. The total maintenance is 1910 according to the investigation I have made, as shown by the books is \$1289.90; that is on dams and flumes at Post Falls. The total for that year on machinery, dams and buildings at Post Falls is \$5,877.85. I have checked for the year 1911, except this item of dams and flumes, and I haven't the time to finish that. I find a mistake in maintenance of water-wheels and governors of \$1.00; it should be reduced \$1.00.

The maintenance for 1911, on everything except dams and flumes, for generators and exciters \$60.70; step-up and step-down transformers, \$923.52; switchboards and electrical appliances, \$3,695.63; miscellaneous equipment, \$36.04; water-wheels and governors, \$545.85; buildings and fixtures, \$839.89; oper-

(Testimony of John B. Fiskén.)

ators' houses, \$582.18. My statement of the total for 1910 would be 2¢ off; I have had charge of the transmission lines and substations in Shoshone county for the years 1908, 1909, 1910, up to the present time. It is very hard to get accurately at the cost of the first line; the costs are mixed as to the lines and substations and right of way, etc. The total cost can be gotten at, but not separated. I can give the accurate cost on some of the transmission lines and substations, that is, the cost per mile; my notes I have are cost per mile. The part of it concerning which I know the actual cost is shown on the books [364—80] part of it is shown clearly in the books; the other part can be closely approximated.

**[Testimony of Fred E. Wonnacott, for Plaintiff.]**

FRED E. WONNACOTT was called and sworn on behalf of the plaintiff and testified as follows:

Direct Examination.

(By Mr. GRAY.)

The assessed valuation of the transmission lines of the Washington Water Power Company in Kootenai county for the year 1911 upon which taxes were paid was the Coeur d'Alene & Spokane line was put in at \$2,000.00 per mile; 180 miles, \$160,000, and 25 miles of the power line running north was assessed at \$1,000 a mile for 23 miles; the original assessment was 25 miles, but there was a reduction of 2 miles made before the Board of Equalization; that makes \$183,000.00 on transmission lines. This is the original assessment-roll; the charges were not made on

(Testimony of Fred E. Wannacott.)

this but were made on the books afterwards the corrections. There were a number of overflow lands, some of them easements and some of them fee lands, assessed against the Washington Water Power Company that year upon which taxes were paid; the assessed valuation was \$25 per acre in the first place, but the State board cut it 15 per cent. The fee lands were assessed just wherever they happened to be, the same as other farm lands. The entire amount of taxes were paid. I will get the list of the lands along the Spokane River between Post Falls and the lake, upon which taxes were paid. [365—81]

**[Testimony of A. J. Wiley, for Plaintiff  
(Recalled).]**

A. J. WILEY was recalled to the stand and testified, on

Direct Examination.

(By Mr. GRAY.)

Based upon the cost of reproduction, I have calculated the annual depreciation upon the property at Post Falls, dams, buildings and machinery. The depreciation upon the dams I figured at 2 per cent upon \$244,143.78. I would like to explain that this is not the full cost of the dams, but is the cost of the dams as given in the original estimate, less the cost of excavation, upon which I did not estimate there would be any depreciation; that amounts to \$4,882.87. The depreciation upon the buildings is 3 per cent upon \$184,676.24, amounting to \$5,540.29; the depreciation upon the machinery is figured in two items,—one upon the power-house machinery and one upon



(Testimony of A. J. Wiley.)

the high tension machinery. The first item is 5 per cent upon \$422,155.53, amounting to \$21,107.77, and the depreciation upon the high tension machinery is figured at 4 per cent upon \$35,799.41, amounting to \$1,431.98. I have totaled those together, the annual depreciation which I allowed, the total is \$32,962.92, leaving out the values for land, the average percentage for depreciation on the balance of the investment according to the cost of reproduction as estimated by me would be approximately three and a half per cent. In my judgment that is a fair and reasonable depreciation to allow for that plant. I would like to make a correction in the figures I gave yesterday; in figuring the depreciated value of the plant I misread the figures so that the depreciated value should be 5 per cent, even less than I gave you. With this deduction the corrected depreciated value is \$817,402.79 [366—82] instead of \$822,402.79. From the standpoint of an electrical engineer, with the experience I have had, I consider an electrical business depending for demand upon a mining community being hazardous. I have heard the testimony that a greater part of the power sold in the Coeur d'Alene mining district, taking into consideration the character of the investment and the character of the demand, and my experience in power with conditions in the State of Idaho, I would say developments in Idaho, and my general acquaintance that 10 per cent was a reasonable and fair rate of net return upon such an investment of this electrical plant. I consider the fact that 8 per cent is an ordi-

(Testimony of A. J. Wiley.)

nary interest upon a good first-class mortgage security, and I thought this should pay at least 2 per cent more, on account of the hazardous nature of the business.

Cross-examination.

(By Mr. ELDER.)

The total amount of annual depreciation I gave is \$32,962.92. I based my opinion that this company should be allowed 10 per cent on the ground that good, first-class mortgages draw 8 per cent, and the hazardous nature of this business should be entitled to 2 per cent more. I have had considerable experience as an engineer in the construction of plants of this kind, but I don't claim to have a national reputation. I have never found that bonds placed on a hydro-electric water plant are the easiest kind of bonds to float. It is very difficult I find to sell bonds on hydro-electric plants. I should say the full rate of interest charged on bonds of hydro-electric plants is 6 per cent. In a great many instances they are issued at 5 per cent. I think the condition is rather exceptional where you could bond at 5 per cent. In making my reports [367—83] to clients in figuring on the rate of interest a hydro-electric plant should earn, I would take into consideration the nature of the country to be served. If it were purely a municipal service, I think that about 8 per cent would be all right, but where the element of risk is involved, where it is largely mining service, I think that I would not recommend less than 10 per cent. With regard to interest allowed, I allowed 2

(Testimony of A. J. Wiley.)

per cent to cover the hazard; it is a common practice in southern Idaho to get 8 per cent on mortgage security. I am not competent to say about a loan for a quarter of a million dollars. I think 2 per cent would be sufficient to cover the hazard. Bonds are usually issued for practically a sufficient amount to build the plant, and they sell for 5 or 6 per cent, but they are not issued at par. They never get par for them; they have to pay commissions for selling bonds. They are usually sold, in my experience, at about from 80 to 90 per cent and run for 20 years. Sales commissions are paid. I would think the actual amount realized on them would be between 5 and 7 per cent interest. In my experience, in plants the promoter of a company of this kind practically takes no risk so far as the investment is concerned. He promotes the enterprise and issues the bonds, floats them, and raises the invested capital, and the bondholders take the risk; that is customary. I should say approximately 7 per cent would cover all contingencies. In some instances they would be sold for over 90, but more nearly I should say at about 85 per cent.

**[D. L. Huntington, for Plaintiff (Recalled).]**

D. L. HUNTINGTON was recalled and testified as follows, on [368—84]

Direct Examination.

(By Mr. GRAY.)

The Washington Water Power Company has about \$5,000,000.00 of bonds issued; the total investment of the company is about \$20,000,000.00;



(Testimony of D. L. Huntington.)

the last bonds were sold at 94 per cent of \$100. I think that was in 1909; that part of the issue bears 5 per cent interest. There are nearly 1200 stockholders in the company; the company has grown from the time when two men ran it to its present size; the company has grown very largely in the last few years; with the exception of these bonds I spoke of, we have increased our capital by issuing our stock to our stockholders, and most of the stock is usually subscribed. As we develop and acquire new property and get the money in that way, what small percentage of it isn't subscribed, after the subscription lists are closed, we sell at the market price, whatever it may be. It is offered to our stockholders they buy it at par.

Cross-examination.

(By Mr. ELDER.)

We had a good deal of trouble to sell those last bonds,—in fact, they are the only bonds we have sold in a great many years; roughly speaking, I don't remember the exact amount, but the company owned by the company is worth \$20,000,000, at this time. I mean by that, that is the book value of it. The electric light and power plant of the business as separate from the street railway business is about 75 per cent. About a quarter of our capital is invested in electric railways, and about three-quarters in light and power business. That is also approximate. It may be a few per cent one way or the other out, but that isn't very far off. [369—85]

Mr. H. L. Bleecker is second vice-president of the company. I think he held that office in 1911.

**[Testimony of George B. Colpas, for Plaintiff  
(Recalled).]**

GEO. B. COLPAS was recalled and testified as follows, on

Direct Examination.

(By Mr. GRAY.)

I can give from the records of the company the total amount of money that was expended on the Post Falls plant up to the first day of January of each year as far back as 1907. The dams from part of the building and that part I am unable to separate; the amount expended on the dams to January 1st, 1907, was \$329,288.69; on the buildings to that date \$87,754.20; on machinery \$254,425.50; to January 1st, 1908, on dams \$335,152.63; on buildings, \$91,724.93; on machinery, \$310,494.32; to the 1st of January, 1909, on dams, \$335,281.96; on buildings, \$91,892.27; on machinery, \$402,739.93; to January 1st, 1910, on dams, \$335,281.96; buildings, \$117,492.57; machinery, \$404,982.22; to the 1st of January, 1911, on dams, \$339,781.96; buildings, \$143,525.41; machinery, \$421,898.91; they all represent charges to the capital account, no maintenance. The actual original cost of the railroad spur and bridge as shown by the books to January 1st, 1907, is \$19,795.39; that has continued through to the same amount during each of these years; nothing else has been charged to the capital account. For that interest on construction which I gave to-day, \$34,570.79 is carried through as one item to January 1st, 1911, and the land and water rights, \$109,272.44, to January 1st, 1911. I

(Testimony of George B. Colpas.)

cannot tell from the books what the Shoshone County property is carried at. The only explanation I can give why I cannot [370—86] tell from the books what that property is carried at would be that it was never asked for in the first place, it was never expected to be asked for; the line was built in connection with other lines running outside of the county, and they were all built together, and it was never expected they would be separated. I could not give the original cost of transmission lines in Idaho. The Coeur d'Alene lines 1 and 2 were built, part of them in Washington and part in Idaho. I cannot tell how much in each State; I do not know that it would be possible to give you the whole cost of the transmission lines into the Coeur d'Alene country, or from Post Falls to Spokane.

**[Testimony of C. L. Corey, for Plaintiff.]**

C. L. COREY was called and sworn on behalf of the plaintiff and testified as follows, on

**Direct Examination.**

(By Mr. GRAY.)

My name is C. L. Corey. I reside at Berkeley, California. My occupation or profession is that of professor in the State University of California, and a consulting engineer, with the offices in San Francisco. I was educated for the profession at the State Institution of Indiana, from which I graduated in 1889, and completed a graduate course in engineering at Cornell University, New York, in 1891. Since that I was instructor in electrical engineering in

(Testimony of C. L. Corey.)

Highland Park College, Des Moines, in the year 1891-92. Since October, 1892, I have been connected with the University of California at Berkeley, teaching principally electrical engineering. Since 1895 I have been in the practice of outside engineering work, [371-87] and pertaining to the valuation of public utilities, especially since 1905, for the cities of San Francisco, Los Angeles, Sacramento, Modesto, Santa Barbara, Alameda, and Stockton, and for public utility corporations for the Los Angeles Gas & Electric Co., for the Great Western Power Co., and for the Washington Water Power Company, and there may be others; those are the principal ones. During that time, I have investigated electric light and power companies, electric street railway companies, and interurban electric railways, telephone companies, gas companies, and there may be others of some smaller kind; those are the general utilities. In my study and investigation for the purpose of ascertaining the cost of plants, constructed and owned by public utility companies, I have had occasion to investigate into the engineering records of the Wisconsin Public Utility and Tax Commission, of the New York commissions, of which there are two, one for the first district, meaning New York and what used to be Brooklyn; the other district for all of New York out of those counties; of the Massachusetts Highway Commission; and of the California Railroad Commission; the State of Washington Commission, and, in certain relations, the Interstate Commerce Commission systems of account-

(Testimony of C. L. Corey.)

ing, or engineering records of cost, and the accounting system which is recommended by the National Electric Light Association; the National Street Railway Association, and of particular corporations, perhaps primarily the American Telephone & Telegraph Co.

I have had, in the practice of my profession, occasion to investigate these various systems in actual use, and the various systems of accounting and retaining engineering costs. [372—88]

I have made an investigation of the system of accounting of the Washington Water Power Company, used in connection with the construction of the Post Falls plant, and the records and system of accounting and the books to ascertain what the system adopted and used was. The examination was begun on the 5th day of July last, that examination continuing at that time until the 19th of July. Subsequent to that for perhaps 10 days in the latter part of July, and August of that year, and again at a subsequent time in the latter part of November and the early part of December of last year, and again in the latter part of December last year and the early part of January of this year; that was not in connection with this litigation at all.

Referring to the cost of construction of the Post Falls plant, I found the sequence of records, after the authorization for the expenditure has been given from the president or the board of directors, or any others, that the work of any particular item, such as the ordering of electrical machinery, if you please,



(Testimony of C. L. Corey.)

was given what was known as a work order. That work order contained, as I found then upon my examination, principally in the engineering offices, rather than in the accounting departments, carbon copies of the actual money expended upon the different parts of the plant. These work orders are numbered, and naturally there would be a large number of sheets of paper of this character, referring to different kinds of work. Upon the work order, if a contract had been let for machinery, you would find a reference, so that you could go to the engineering files and get the actual contract. Connected with that contract, or referred to by this contract, [373—89] were all costs in connection with that machinery, such as freight, haulage, transportation. Following that to—I am sure I don't know of my own knowledge what the technical name of the book would be, but a ledger, or preliminary ledger, in which all of these items were properly collected under their heads, a great number of different items; then all the costs that had gone into the construction of the plant, labor and material, and contracts for such portion as there were contracts, and any additional charges were entered in this book, and finally, in order to check up and make sure that all of these had been entered, I found the general ledger in the auditor of the company showing all of the items; and the aggregate, and, in some cases, segregated into the items going to make up the entire plant.

The system is not an unusual one. It is a modern and very efficient one. It is true that the system,

(Testimony of C. L. Corey.)

as has been designated the work order system, sometimes bears other names than work order. I found in most systems of accounting they will have a designation such as is commonly called G. M. O., which means general manager's order; that is, particularly, in transportation systems, coming from the common practice of the steam railways. For some of the power companies they are called O. F. E., an order for expenditure; but under any condition the final file will set forth what is set forth in what are work orders, and what I found were called work orders; termed work orders, by the Washington Water Power Company, in the system there used.

I have had experience with hydro-electric plants and water plants as follows: Investigation of the Northern California Power Company; the Great Western Power Company, [374—90] The Yosemite Valley Electric plant, which was installed under my direction by the State; the Oro Water, Light & Power Co., the Arizona Power Company, in Arizona; in Vancouver, the Vancouver Power Company; in Utah, the installation of certain parts of the Telluride Power Company. I have had different duties with those companies; for the Northern California Power Company, I was consulting engineer during its construction; similarly for the Oro Water, Light & Power Company; for the Cloverdale Light & Power Company; for the Truckee River General Electric Company, in California and Nevada; for the Arizona Power Company; in an

(Testimony of C. L. Corey.)

advisory capacity only on the work of the Telluride Power Company; but in general the work which I had to do was in connection with the development or extension or the investigation of the physical conditions of some of the operating plants that had been put in operation. I have myself appraised various hydro-electric plants in operation. In addition to the practical experience I have had during the years I have given, I have spent time in reading literature upon the subjects connected with my profession, and the particular lines which I have followed. I have read and investigated the reports of the various railroad commissions and public service commissions. I have made an investigation and study of the question of depreciation as applied to hydro-electric plants and to other public utility plants. In connection with depreciation the work which I have had has been extensive, primarily because of the elements going into the value, as well as the annual operating cost of public utilities, usually for the city or some other rate-fixing body, in connection with a report to them. [375—91]

I have given study to the subject of maintenance in the same way; depreciation is a reduction in the value of a thing due to wear and tear, which cannot be overcome by repair or maintenance, by the fact that the thing becomes inadequate for any reason for the purpose for which it is used, or becomes obsolete or out of date. Maintenance is represented by the cost of keeping a thing in operating condition, so that its working condition will be as nearly as pos-

(Testimony of C. L. Corey.)

sible 100 per cent of its original working condition. The item of depreciation in connection with the plant under consideration here is based on what has been defined as the straight line depreciation, which is based primarily upon the estimate of the useful life of the plant as a whole, that useful life being determined by the life of the various elements which will go to make up that plant. I used the straight line depreciation because by using that system of depreciation, the depreciation is averaged over the entire life of the element, and by what is known as the curved line of depreciation, it leaves the maintaining of the invested capital intact, all to the last years of life of the system, which is not the right thing to do when there is any possibility that in the latter years of the life of the utility its earning power may not be as great as in the beginning.

It is a very difficult matter to always determine whether an expenditure upon a part of a plant should be charged to maintenance or depreciation. There are certain specific regulations set forth by the Interstate Commerce Commission, and by the public utility commissions. I may say this: All money that is expended for repair, upkeep, or to maintain the device in good operating condition, must be charged to [376—92] maintenance and must not be charged to depreciation. Anything which cannot possibly be prevented, no matter how much you repair the article and still lead to the abandonment of the element must go to depreciation. It would be absolutely wrong to attempt to determine the net earnings of

(Testimony of C. L. Corey.)

any company, public utility, or otherwise, if we were to confine the expenditures as far as maintenance, to a single year.

I am familiar with the Post Falls plant of the Washington Power Company. I have fully examined and investigated it; I have in the examination of these accounts and records gone into the question of the cost of it, and of the various items in it, in a general way; that was during these various trips; that was during July and August last year. I am familiar with the character of the transmission lines which run out from that plant. I have made an investigation of the subject of the amount of moneys per mile properly chargeable as maintenance to such transmission lines. It being understood that that estimate is based upon the average covering the entire life of the wooden pole line construction. The estimated life of such transmission and distribution lines is about 12 to 15 years. That is the whole structure as a pole line, including poles, cross-arms, insulators, braces, pins, insulators and conductors, and the telephone equipment that is placed thereon. I mean everything that goes to make up a transmission line, where wooden poles are used. Based upon my knowledge, of such transmission lines over the same character of country, subject to the same set of conditions, I should estimate the average maintenance charge to be about \$100.00 per mile for a year. I should take the depreciation on such transmission lines at about 8 per cent, which would correspond [377—93] to an estimated life of between 12 and 13 years.



(Testimony of C. L. Corey.)

From my knowledge of such dams as those of the Washington Water Power Company, used in the same way as those dams are used, I should estimate, and believe, 2 per cent to be the reasonable depreciation to be charged off and allowed the proper element of life being taken into consideration, and corresponding to an ultimate life of 50 years. From my knowledge of these dams and my knowledge of the maintenance on dams of a similar character over a long period, I should estimate the maintenance to be somewhere between 1 and 2 per cent, possibly 1 per cent would cover the general item; in other words, I should think the sum of \$3,000 would approximately cover that; for these dams and the devices connected with the dams forming part of them, I would allow 3 per cent for depreciation for the buildings. I should estimate the maintenance charges on buildings such as the Post Falls main power generating station, and also the building that goes with it, for the high tension equipment, at some 4 or 5 per cent per year.

For the maintenance of the machinery, answering the question as the average maintenance throughout the entire life of the machinery, consisting of the water turbines and the electrical generators, and the transformers, and the high tension apparatus, I should estimate that at something about 2 per cent, over the entire life of the composite equipment. I should consider a depreciation, estimated entirely upon the ultimate life, of an average of 5 per cent, on the group I mentioned,

(Testimony of C. L. Corey.)

not so much perhaps for the turbines as for the electrical machinery;—between 4 and 5 per cent, depending upon the different parts of the machinery; for the [378—94] high tension apparatus decidedly more, six and two-thirds, or corresponding to a sixteen year life for such equipment, and averaging about 5 per cent. In my judgment, a return of 10 per cent would be proper, as the rate of fair return upon such a plant as the Post Falls plant, taking into consideration the fact that in large measure the demands for power are from a mining country, and taking into consideration that there are possibilities of competition in that mining country, and that there is no other demand in that mining country except as a result of the production of the metals. I am basing that solely upon decisions of the court and the State Commissions for exactly similar service. The business of furnishing mines, from my own experience in hydro-electric development, is not as stable a business as the supplying of a growing city or a large city with electric lights and power. The valuation of the plant at Post Falls, which is the source of the electrical energy, will depend upon a number of factors. One of the evidences of its value, but not at all the only one, will be the first cost of construction.

The value of the plant will be determined by the amount of energy which it will produce, its output. It will depend upon the supply of demand, or will depend upon the market for this power. It will depend on the cost of delivering this power to

(Testimony of C. L. Corey.)

that market. It will depend upon the cost of substitute power from any reasonable source. It will depend upon the permanency of that market. It will depend upon the character of contracts, whether for a short period or a long period, which it possesses. It will depend upon its value as a going concern, as contrasted merely with a physical plant, ready to supply, but having no market, complete, but not in [379—95] operation, as contrasted with it and its distribution system, giving service, and adequate and satisfactory service throughout the entire period of demand during the year when such service is required. Those are in general the elements that must be considered in determining the value of such a plant. Given the gross revenues received from the power generated at Post Falls, knowing that in addition to the dams, machinery and buildings there is a distribution system, I should appraise the values of those dams, buildings and machinery based upon the net revenues, by attempting to get at the net revenues over as long a period of time as possible, both in the past, and estimated for the future and capitalize that net revenue, after all expenses of operation has been paid, upon a fair return, and consider all the costs outside of the dams and power plant and so on, and deduct those costs from such a capitalized value, and that would be one measure and one evidence of the value of the property.

(Witness temporarily withdrawn.)

[**Testimony of George B. Colpas, for Plaintiff  
(Recalled—Cross-examination).**]

GEO. B. COLPAS was recalled and testified as follows, on

Cross-examination.

(By Mr. ELDER.)

I have the total cost of the railroad spur and bridge—\$19,795.39. I have all the details here for \$19,305.00. There is \$375 of details that I haven't got, and if that will be satisfactory, the largest item is the contract of \$18,034. There is the details of it (handing papers to Mr. Elder). There was no charge for steel rails used on this. I think the Northern Pacific railroad furnished those and took them back again. I believe the spur was taken up this year, and they took the rails back. I do not [380—96] know the length of the spur; I can't say as to whether the company paid the Northern Pacific any sum for the use of those rails; almost the whole cost of the bridge and spur was done by contract with Bennett & Beeler, that is, almost all of the costs, and there is no rails shown here. By "Force account" is meant for items, expenses laid out which they cannot explain. The force account in this case was small, five hundred dollars. I do not know the value of the rails that were used on this spur; they were not billed to us at any value.

**[Testimony of D. L. Huntington, for Plaintiff  
(Recalled).]**

D. L. HUNTINGTON was recalled and testified as follows, on

Direct Examination.

(By Mr. GRAY.)

The period of the longest contracts we have for the sale of power generated at Post Falls, in the mines is 5 years. None of the contracts exceed that. There are some of them in which the customer has the option of renewal; we haven't; it is with him, and not with us.

**[Testimony of F. R. Insinger, for Plaintiff.]**

F. R. INSINGER, sworn as a witness on the part of plaintiff, testified as follows, on

Direct Examination.

(By Mr. POST.)

My name is F. R. Insinger. I live at Spokane; have lived there for 15 years. I am manager of the Pacific Hypotheek Bank; that is strictly a mortgage company. We have a second mortgage company called the Tweed Northwestern, connected as delegate for the trustees with the Holland Bank, another [381—97] mortgage company, having an office in Spokane. I was at one time manager of that, and also connected with the Spokane & Eastern Trust Company, as trustee, doing a mortgage business. I am president of the Chamber of Commerce of Spokane.

The Northwestern Pacific Hypotheek Bank does business in Idaho, Eastern Washington and Eastern



(Testimony of F. R. Insinger.)

Oregon. It has been doing a mortgage business in that section since 1885. The Holland Bank has been doing business since 1897 under its present name; it is a reorganized company. The Northwestern Pacific Hypotheek Bank has now loaned on first mortgages in Idaho, Eastern Washington and Eastern Oregon, a little over six million dollars; about between a million and a million and a half of which is loaned in Idaho; the money is loaned in the State of Idaho at 8 per cent, and the same rate in Eastern Washington and Eastern Oregon. We aim to loan upon the property mortgaged at not to exceed 40 per cent of its valuation. We loan in most of the counties in Idaho; a considerable sum in Twin Falls County; not as much in Ada County, we are beginning there. The Holland Bank has loaned altogether in Washington, Idaho and Oregon, about \$1,700,000; about one-half of that in Idaho at a rate of from 8 to 8½ per cent. The maximum per cent of the value of the property which we aim to loan at is 40 per cent. The bulk are comparatively recent loans. Our companies are in competition with other mortgage companies in the same section of the country. That is the rate charged by all mortgage companies. Our biggest loan at the present time is \$55,000; that is in Spokane on some city property; the rate of interest on that is 7 per cent; that is an old loan at 7 per cent. I think \$25,000 is the biggest loan in Idaho; that is a farm loan at a rate of 8 per cent. [382—98]

(Testimony of F. R. Insinger.)

Cross-examination.

(By Mr. ELDER.)

The loans average a few thousand dollars—from two thousand to five thousand dollars. I know the rate of interest paid on large loans in this community; I know of some say from five million to twelve million dollars. It is pretty hard to say what the rate on those is. Most of these bond issues vary. They go from five to eight per cent, and some with commission and some without commission or discount. It is pretty hard unless you state the more particular line of business; it is almost impossible to state what it is; very few of the large loans are made at 5 per cent; I do not know of any in Idaho. I did know about a loan of the Washington Water Power Company; I know the rate of interest charged on some large loans such as first mortgages on water-power sites in Idaho. I do not know of any particular case just now of loans over a million dollars on such property.

Redirect Examination.

(By Mr. POST.)

I have recently had some experience with a proposed large loan in Idaho from a corporation. I was trying to negotiate a loan for the Twin Falls Canal Company; they are the owners of the water rights and distributing system and dam of the Twin Falls Irrigation Project. The canal system has cost about three and a half million. It is valued roughly at \$5,000,000. This proposed loan was to be \$300,000, about 6 per cent of its value. The going

(Testimony of F. R. Insinger.)

rate of interest for a large loan upon a water project or [383—99] irrigation project would be different if the amount loaned was, say, 25 per cent of the value of its property, than it would be if the amount loaned was 90 or 95 per cent of the value of its property. The rate of interest, if you could borrow the money at 90 per cent, would be higher than if it was 25 per cent. The Spokane & Eastern Trust Company does a trust business, handles bonds on industrials. It is possible that loans could be placed on an industrial such as a water-power proposition at 90 per cent of the value; they have done it; it is possible with companies like the Hypotheek Bank; the Trowbridge & Niver people in Chicago made considerable loans at supposedly large parts of the value of the project. They loaned on irrigation projects, dams, reservoirs and canals. I do not think bonds secured by mortgage up to 90 per cent of the value of industrials, water-power plants are generally considered as marketable securities, no matter what the rate of interest is.

**[Testimony of Eugene Logan, for Plaintiff.]**

EUGENE LOGAN was called and sworn on the part of plaintiff, and testified as follows, on

Direct Examination.

(By Mr. GRAY.)

My name is Eugene Logan. I live at Spokane. I am a civil engineer. I am acquainted with the pole lines of the Washington Water Power Company in Shoshone County; I have surveyed them to

(Testimony of Eugene Logan.)

ascertain the length of the various lines; I know what lines the company had constructed in that county in 1908, and during the years 1909 and 1910; those pole lines were given particular names; I have my original notes on my [384—100] own surveys of the lines; there was Coeur d'Alene No. 1 and its branches; Coeur d'Alene No. 2, 60,000 volt lines, both of them. I can tell you how many miles of the No. 1 and its branches were constructed during 1908 from my surveys and from my familiarity with them. Coeur d'Alene No. 1 and its branches that were in operation during that time, this was on January 1st, 1909, 41.07. Coeur d'Alene No. 2, 21.55; a total of 62.69 miles. On January 1st, 1910, Coeur d'Alene No. 1 and branches, 41.07 miles; Coeur d'Alene No. 2, 21.55; secondary pole lines 15.44 miles. On the 1st of January, 1911, Coeur d'Alene No. 1 and branches, 41.07; Coeur d'Alene No. 2, 21.55; secondary pole lines, 20.75 miles.

Cross-examination.

(By Mr. WERNETTE.)

I did the surveying myself. I had a party assisting me; I was there every day with the party; I kept the notes to a certain extent and I know they are correct; all notes were kept under my direction. I checked up those notes and know they are absolutely correct, I have them here; those are the original notes I have of the Shoshone County pole lines here, and the figures I gave were the number of miles of pole line in Shoshone County of the company at the time testified to. There were none in

(Testimony of Eugene Logan.)

use besides the ones I have testified to; those are all the pole lines of the company and those included those in use and those not in use. In considering the number of miles I consider to the building where the line goes into the building, where the customer uses it. The word "pole line" means the length of the line, and that is to each individual customer; there is no instance where it merely goes to where the transformer is situated. [385—101] The primary line is 60,000 volt line and the secondary line is a 2,300 or a 6,900 volt line.

**[Testimony of John B. Fiskén, for Plaintiff  
(Recalled).]**

JOHN B. FISKÉN was recalled and testified as follows, on

Direct Examination.

(By Mr. GRAY.)

I acted in a consulting capacity on the erection of our first 60,000 volt lines to the Coeur d'Alenes, on the branch from that line to Post Falls, and on the construction of the line to Medical Lake. Since then I have been, up to about two years ago, I have acted as designing engineer, locating engineer, superintendent of construction, of all of our 60,000 volt line, including the line to the Palouse country. The Big Bend country, the second line to the Coeur d'Alenes, and a number of smaller ones.

I am familiar with those things, which go into the construction of a transmission line and their cost, and was in the years 1908, 1909 and 1910. I am familiar with line No. 1 of this company in Shoshone



(Testimony of John B. Fiske.)

County; the reasonable cost of constructing a line such as Coeur d'Alene No. 1 is about \$2,000 per mile; the No. 2 line could probably be built for \$3,200 per mile. Secondary lines about \$1500 per mile. I am familiar with the substation during these various years referred to; the cost would be approximately the same. I am familiar with the substations of the company in Shoshone County; in 1908 we had 12; 1909, 12; 1910, 13. I am familiar with all of these substations and the contents, and what machinery is in them. The experience I have had in designing and constructing such substations, I was consulting engineer in reference to the first 8 of those substations which were built. I have had [386—102] immediate charge of the construction of all the substations, both in Shoshone County and in the State of Washington, constructed since that time. The average cost of those substations would be about \$15,000 apiece. In 1908 there were 10 equipped and 2 vacant; in 1909, 10 equipped and 2 vacant; in 1910, 10 equipped and 3 vacant. The reasonable cost of those that were vacant would be about \$2,500 each. Line No. 1 and its branches were built through 1902 and 1903; the Shoshone County part was built last, part of it was built in 1908 and part in 1909, 8 substations were built in 1903, 1 in 1904, 1 in 1905 and 2 in 1907. The 2 that were dismantled that I have spoken of were 2 of the 8 original built in 1903. I have checked from the transfer ledger of our records to find the maintenance of dams and flumes for the year 1911; the total for

(Testimony of John B. Fisk.)

maintenance for dams and flumes for that year was \$3,872.46. It does not agree with the amount I testified to the other day; there is a discrepancy; two items that I haven't so far been able to locate, the amount is \$31.18, less the figures which I gave before. I can probably find these figures.

Cross-examination.

(By Mr. WERNETTE.)

The measurements that were made as to the number of kilowatt hours, sent to Shoshone county, was at the different points in Shoshone county; they were measured at the place where we delivered the current to the consumer. That is true in each case; that is what we charge the consumer for. In some cases the consumer stood the line loss and in other cases we stood it; by that I mean the line loss from the substation; in some cases the power was measured at the substations and the consumer built his own line from there to where he used [337—103] the power; in other cases we built the line from the substation to the consumer's premises, and metered the current there. The current that was sent to Spokane was measured in the first instance at Post Falls; it was not again measured in Spokane. We had a meter down there to measure it when it was taken at Spokane. The meters weren't connected up to measure the incoming current correctly. They were there to meter the outgoing current. The current that was delivered in Kootenai County was metered at Post Falls. In the case of Strathern and Martin, it was measured about a half a mile

(Testimony of John B. Fiskén.)

from where it was delivered to the consumer; that was the same with the Kootenai Power Company, about a half a mile out. With the Spokane Railway it was metered at the station. In connection with my work with the pole-lines, as soon as I got a survey, I had to lay out the work, generally arrange the camps, engage foremen, and after I got them in the field I had to visit the works and see that it was done properly. I had to see that material was delivered on the job that they required; I had to take the regular reports of the work sent in and see that the work was posted properly; I had to see that the items of cost were properly entered, and that the work didn't cost more than it should. Before that I had to make an estimate of what the work was expected to cost, and finally had to check up the total cost.

I estimate the cost of those pole lines in Shoshone, Coeur d'Alene No. 1 and branches, at about \$2,000 a mile; there are 42 poles to the mile; the standard size of the poles is 32 feet; there are some larger poles in that line, not very many; they are cedar poles; it cost about five or six [388—104] dollars a pole to put them in the ground; it cost about five dollars a pole to put them up. I sized the ground up generally, and that is an average price from my knowledge of the country; that includes the rock excavated for the pole. The No. 1 line was originally equipped with 3 piece insulators, but they were the first 60,000 volt insulators manufactured; the insulator alone is worth about \$2.25 in place; there is one cross-arm to

(Testimony of John B. Fiskien.)

a pole, very few braces; the cross-arms are six by six in the rough and 48 inches long. They are put on surfaced. They are sized down to about  $5\frac{3}{4}$  by  $5\frac{3}{4}$ ; we buy them finished. Where braces are used there would be an additional cost of 25 cents; the size of the wire used in line No. 1 is No. 2 Brown-Sharps; it is copper. I do not know what they cost; the approximate cost of that wire is 20 cents a pound; that is an average price; it would cost about \$45 a mile to put it in place. I have not all these amounts in my record; at the time that pole line was built our costs were not segregated; the company knows to a cent what it cost to build the whole line, but we keep separate account of the cost in Spokane and Kootenai and Shoshone County. It cost about \$2,200 a mile to build the whole line. These figures were not kept in accordance with our modern method of bookkeeping. This line was built 10 or 12 years ago. It would take quite a while to get the actual cost. I would say that line No. 2 was worth approximately \$3,200 a mile. I account for the difference in cost of the two lines, because we built the line No. 1 in 1903, and it was about the first 60,000 volt line in existence commercially. We did not know what was required to make an economical line, that is to say, both as regards its maintenance and other items. Between 1903 and 1907, when we began to plan for a second line, we had had 4 years of practical experience [389—105] and we found it was necessary to spend a great deal more money to build a line that would stand up almost continuously. Our records show

(Testimony of John B. Fisk.)

that our second line stood up almost continuously, but our No. 1 line did not; we had a good deal of trouble with it. The additional expense comes in by having a higher class of insulator, stronger poles, more expense in clearing right of way, and selecting a route more clear from trees. The right of way was not considered in my estimate; the clearing of the right of way is considered, not the purchase. On the No. 1 line it cost about \$100 a mile; on that line it was 100 feet wide. The brush and stumps were not cleaned out.

A path or line of 100 feet was cleared on the No. 2 line; it cost a great deal more to clear the No. 1, because the line was located in a different place. It was located through a more timbered country. That was done to get it higher up in the hills. The clearing of the No. 2 line cost about \$250 a mile. There are about 28 poles to the mile on line No. 2; the standard length of the poles there was 50 feet, but a great many longer poles are used. Much more attention was paid to grading the line than had been done in the case of line No. 1; that is to say, the sharp dips and peaks in the line were eliminated. The insulators alone cost about the same; they were a much better insulator but the cost has been reduced; they were 4-piece insulators. The No. 2 line was built with a triangle twice the size of No. 1.

The wire on the line in Shoshone County was copper; there was a telephone line on this pole-line; they were constructed at the time the line was and included in my estimate. The [390—106] tele-



(Testimony of John B. Fisk.)

phone line cost about \$250 a mile on the No. 2 line. In regard to the No. 1 line we kept a complete record of the cost but I am not in a position to give you the cost of the line in Shoshone County. \$1500 a mile would be a reasonable cost for the secondary pole-line. I based my estimate on my personal knowledge of the cost. I had charge of all that work; I do not know exactly what the cost of the copper was in the Coeur d'Alene No. 2 branch or line, but about 20¢. The cost of the copper has always fluctuated, I haven't looked at the market for quite a while.

In giving my estimate of the cost I tried to be guided by my recollection of what the wire cost at that time. Such data can be furnished. I do not remember what the price of copper in the year 1911 was compared with the time that No. 2 branch was constructed. I do not remember what it was the year before. It has averaged around 20 cents for a number of years; that is the price delivered; the price of the poles at the time they were put in in this No. 2 branch averaged about \$15 a pole. Some of the poles were delivered across here at Squaw Bay and we had to drive them across, that is an estimate, and to the best of my knowledge and recollection they cost about the same the year before. In the last 6 months there has been a slight reduction in poles; they have varied up and down slightly, but do not to any great extent. It depends largely as to how many poles are on the market. Those poles on the No. 2 line cost about \$12 apiece in place. The labor cost about \$80 a mile for putting up the insulators and stringing the

(Testimony of John B. Fisk.)

wire. I account for the difference in price between the secondary pole-line and the larger one, because the secondary insulators are very much cheaper. There is not [391—107] very much difference in the cross-arms; the clearing for the secondary lines is not as heavy; we don't clear very much for that. The difference in the cost of the insulators on the secondary lines and on Coeur d'Alene No. 2 branch is \$2.50. The difference between the price of the insulators on No. 2 line and secondary pole-line is about \$220 per mile.

In 1908 we had 12 substations in Shoshone County; that is not a substation at Cataldo; that is a switching station. We had 10 of those substations equipped in 1908; they were not all the same size; they varied that year, a different style of construction; they averaged about the same cost, they were equipped differently. I have been giving the average cost of all of them. I have not records showing what the cost of each individual substation was; the original cost of the substations and lines were put together. We can give you the total cost of the No. 1 line, with the substations, but we can't segregate it without a great deal of labor. It can probably be done very correctly, but it will take a great deal of labor to do it. The later substations we have the cost of; I have not noted anything for real estate, for the reason that I do not remember any case where the real estate has cost us anything, and no real estate is figured in my estimate. I have not the plans here of the substations equipped in 1908. They were about

(Testimony of John B. Fisk.)

18 by 22 and about 35 feet high, made of brick mortar, with steel beams, wooden doors and ordinary wooden window frames and sash, corrugated iron roof. That is not true of all of them; some of the substations are of larger dimensions, and 5 of our substations are steel frames covered with corrugated iron. In some of them there are lightning arresters, not in all of them; in each case there is a high tension oil [392—108] switch. There are step-down transformers in some cases two, and in other cases one; there are switchboard panels, and an immense amount of small stuff, wire, etc.

I can give you how many step down transformers there are; in the 10 that were equipped in 1908, there would be about 30 switchboards. The average cost of those transformers in the 10 substations equipped in 1908 was about \$7 per K. W. The step down was from 60,000 to 2,300. I do not know exactly how many lightning arresters there were in those 10 equipped substations in 1908, nor how many transformers were in the substations in 1910, nor exactly how many switchboards, nor how many lightning-arresters. The amounts I gave are not a rough guess; it is a very close figure. Because I have had occasion to know these costs and I am thoroughly familiar with these costs. I have had occasion to not only make the estimates, but to find out after the work is done what they have cost. The average cost of the buildings of one of those substations was about \$2,500. The buildings together with the apparatus and machinery, \$15,000.

(Testimony of John B. Fiskén.)

The total output of the Post Falls plant for 1910 was 57,127,000 K. W. measured at the switchboard at the Post Falls plant. I put these notes down from my own knowledge. I didn't have a record with me when I did it.

Direct Examination.

(By Mr. GRAY.)

For the No. 1 line the cost per mile was per mile, poles, \$250; cross-arms and lag screws, \$21; pins and insulators, \$250; telephone-arms and lags, \$10; telephone insulators and pins, \$8; wires, \$600; telephone wire, \$112; labor on poles, \$252; stringing the high tension wire, \$45; stringing the telephone wire, \$20; hauling, \$100; clearing, \$150; [393—109] camp expenses, \$20; making roads, \$100; foreman, time-keeper, \$15; superintendence and sundries, 10%, \$195; making a total of \$2,148. My estimate was a little lower.

Taking the No. 2 line, poles, \$260; cross-arms and lags, \$26; pins and insulators, \$215; telephone-arms and lags, \$8; telephone insulators and pins, \$5; wire, \$1,000; telephone wire, \$112; labor and poles, \$390; stringing high tension wire, \$60; stringing telephone wire, \$20; hauling, \$300; clearing, \$350; camp expense, \$20; making roads, \$150; foreman, timekeeper, \$15; superintendent and sundries, 10%, \$293, making a total of \$3,224.

The clearing and hauling came to so much because the No. 2 line took a different route; we wanted to get out of the river bottom to a large extent, and put it up into the hills, where there was much more clear-

(Testimony of John B. Fisk.)

ing, and that accounts for the heavier cost of hauling. There is a railroad along that line; it runs back from the railroad quite a little ways, between Kellogg and Osborn.

The cost of secondary lines per mile, poles \$250; cross-arms and lags, \$25; wire, \$600; labor and poles, \$250; stringing wire, \$45; hauling, \$75; clearing, \$50; camp expenses, \$50; foreman, timekeeper, \$15; superintendent and sundries, \$136; making a total of \$1,496. The right of way cost some money; I do not know how much; I haven't included that.

Recross-examination.

(By Mr. WERNETTE.)

In regard to camp expenses, I would say that in some cases we run a construction camp, in which all the men all board, [394—110] and as a general rule we run behind. Of course the men are charged so much for their board, and, as a general rule, our camps are not quite large enough to cover the expenses. If you will notice, on the high tension lines the expenses are very high, and the reason for that is that in a great many of the lines we did not run a camp, but we boarded our men at the hotels. The deduction we made from their pay was the same as if we were running a camp, and we took care of the difference, which in some cases ran away up, so I figured the camp expense of the low tension lines very much higher than on the No. 1 and No. 2 lines. This last item of \$50 covers all the secondary lines in the county. I know that it was about that cost. The wire used on what we call the No. 2 line was not the



(Testimony of John B. Fisk.)

same size as on the No. 1 line. The wire used on No. 1 line was No. 2, and on the No. 2 line was No. 0. On the No. 1 line the wire is 1064 pounds to the mile. On the No. 2 line there are 3 wires to the mile, so the total would be three times that per mile; that wire weighs 1688 pounds to the mile, and that is to be multiplied by 3 also, making practically 5,000 pounds to the mile, and on the No. 1 line there would be practically 3,000 pounds to the mile and 3 wires on each line.

**[Testimony of Fred E. Wonnacott, for Plaintiff  
(Recalled).]**

FRED E. WONNACOTT was recalled to the stand and testified:

Direct Examination.

(By Mr. GRAY.)

The assessed valuation of the pole-lines in Kootenai County, which I gave, \$183,000, for the year 1911, was correct. There were \$6,917.31 acres of easement lands; they were [395—111] assessed at \$25 per acre; the fee lands, not including the property at Post Falls, 375.19 acres. I didn't get the figures on that; there were a great many tracts; lands at Post Falls and immediate vicinity, \$565,944, that includes the power site and everything; here is the acreage of right of way of the pole-lines, 839,69, those are easements. I have the tax receipts for the assessed valuation of the fee lands. Of that 6,000 acres of easement lands, there are a great many different tracts situated in various places. There are 15 pieces of

(Testimony of Fred E. Wonnacott.)

fee lands; that is outside of the plant property up here.

(Witness temporarily excused.)

[**Testimony of C. L. Cory, for Plaintiff (Recalled).**]

C. L. CORY was recalled and testified on

Direct Examination.

(By Mr. GRAY.)

I have not computed the depreciation of the transmission lines during each of the years 1908, 1909 and 1910, being on the second Monday of January of each year. The depreciated value based on the testimony as to their value, which has been introduced here, on the lines in Kootenai County, on a valuation of \$2,000 per mile; on the lines in Shoshone County, the No. 1 line \$2,000 per mile, and the No. 2 line \$3,200 per mile; the secondary lines \$1,500 per mile. I have determined the depreciation upon the dams, buildings and machinery at Post Falls for each of the years 1908, 1909 and 1910 in dollars. I estimate the life of the line to be 12 years; in other words, I figure upon depreciation of practically 8 and one-third per cent per year covering the life of the line. Every item which would be expended upon a pole-line which would prolong its life, in other words, if, [396—112] out of a pole-line having 1,000 poles, during the first five years, we will say, 200 of those poles had actually been taken out and replaced, if your line, the previous year, by new poles, the expenditure of replacement should come from the depreciation fund. In a plant of this kind it would be customary to replace or

(Testimony of C. L. Cory.)

substitute from year to year a new device for an old one. One could not give the present cost of the plant by merely making a calculation of the percentage without knowing how much had been replaced. To make that clear, if, as we often find to be the case, high tension switches were installed, we will say, in 1908, the advance in the art may have been, and in fact in this case has been, such that a switch which was considered the best possible in 1908 is practically inoperative at the present time; if that first switch is now and has been replaced by a new switch, perhaps of the 1910 or 1911 model—I refer to the automobile as an instance—then that replacement cost should come from the depreciation fund and should not be charged to maintenance, because that has been an expenditure which prolongs the useful life of that element, the high tension switch. You can naturally see, if the Court please, that it is a complex matter to arrive at what is generally termed the costs, less depreciation, at any interval, because in actual practice there are two things going on all the time, one, actual additions to the capital, which must not be depreciated until the expenditure is made; on the other hand, if an expenditure is made to allay depreciation, then it should not be charged to maintenance, but should be charged to depreciation.

The term maintenance as used by me is expressed often by other engineers under the expression “current repairs”; except that I believe that current repairs would be but a [397—113] part of maintenance.

(Testimony of C. L. Cory.)

Supposing that one pole there had become injured in such a way that it ought to be taken down and another pole put in its place, the expense of putting in that new pole would be charged to maintenance, as definitely determined by the Commissions, and as is the common practice in valuation work, because it is a very small element of the entire structure. If there were a number of poles, a mile of poles, for instance, to be repaired and replaced, it would depend on why the line is rebuilt. If the line is rebuilt because of the necessity of changing the route, that would be charged to maintenance. That is not under any report of the operating company. If that line is replaced because of necessity of increasing the height of the poles on account of change of structure in a large number of blocks, then the cost should be charged to construction, depreciation and maintenance. On the other side, each case must be determined by itself. Suppose the average life of the pole is 12 years, and suppose those poles for a mile are 6 years old, and because it is very wet, damp ground, or for some other reason, they died before the others and you put in new poles, I would say that that would be extraordinary conditions locally in a small part of the whole and would be charged to maintenance. Depreciation is something which must be considered as covering the entire structure, whatever it may be, a pole-line, building, a piece of machinery. Maintenance is something which involves only a very small part of that, such as repairing the brushes of a generator or repairing an armature, which would un-

(Testimony of C. L. Cory.)

questionably be charged to maintenance. That would not be true if it is a question of obsolescence, the obsolescence [398—114] naturally would have to be considered upon the whole element. Suppose we have a generator and an entirely new type of brushes would come out better, and an element of cost of a few hundred dollars, the replacement of those old brushes by the new brushes I would say would be charged to maintenance, because, in the end, with the machine as a whole we have not probably increased the useful life of that machine materially. It might be such a fine point as to divide a part of the costs of that new brush between maintenance and depreciation. There is no question but it is a complex matter in all of these items to in each case carefully segregate between a maintenance operating cost and a depreciation operating cost. At the present time a great many of these wooden poles are taken out in different parts of the country and better poles substituted, the wooden poles found inadequate. These wooden poles are supplanted either by steel poles or what are known as steel towers, but what seems to be more important now, the substitute will be replaced by reinforced concrete poles that are unquestionably better than any of the others. Suppose a pole-line in good repair is deemed to be inadequate and is substituted by new poles, and they take them out and put in new ones, the expense for that would be charged to depreciation. In getting at the value of a plant which has been actually in operation for a number of years, based upon the cost



(Testimony of C. L. Cory.)

of reproduction you determine the value of that plant by deducting from the cost of reproduction the proper depreciation charge at the end of the year upon the average reproduction cost of that particular portion of the plant about the middle of the previous year, bearing in mind that when you consider the next year any [399—115] addition to the plant properly chargeable to capital, such as extension, shall not be charged to depreciation until the year when it is actually in use, so that it is a constant case of deducting depreciation for the previous year and adding additional investment to capital for the previous year until you finally arrive at the end of the period at which you desire to determine the depreciated cost, or what is definitely designated as the plant balance at that date.

I have examined this plant at Post Falls. If I am given the original cost of that plant at the time when it was constructed, and its net earnings during the last three years, I can tell approximately its value, knowing the character of the market which yields the net earnings. I have the figures as to what the output has been in 1908, 1909 and 1910. I have the average net earnings for 1908, 1909 and 1910. I have also the valuation of the flowage rights, \$180,000. The transmission line in Kootenai County, \$183,000 and the

I have heard Mr. Fiskens's testimony as to the mileage, when it was built, and the reasonable cost of construction, and from the testimony here given and the original cost of that plant at the time when

(Testimony of C. L. Cory.)

it was constructed and its net earnings during the last 3 years, I can approximately state its value. At the start in answering that question, I want to absolutely distinguish the matter of cost and value. Considering the depreciated cost of the plant on January 1st, 1911, exclusive of any real estate, at approximately \$817,000, considering that the net revenue of the plant for the three years, 1908, 1909 and 1910 averages \$164,000, considering that 80 per cent of this revenue is derived from the sale of power to mines, and considering that the ruling rate of [400—116] interest on mortgages in this section of the country is from 8 to 8½ per cent. I should state that the value of the plant as a going concern, with contracts, actually giving service, having been tried out for a period of perhaps 4 or 5 years as to its cost of maintenance, and taking into consideration as well its first cost, that the value of the plant—generally defined, and upon this basis, that it is a value at which an owner willing to sell actually does sell to a buyer willing to buy, at \$988,573.85.

In arriving at this value, which I have defined, upon the basis of the capitalized earnings, I have taken the average net receipts for the years 1908, 1909 and 1910, which amount to \$164,116.61. That, capitalized at a rate of interest which is interest, and in addition to interest rates, a profit to cover the conduct of the business and the hazard in the operation of the business, not only as regards the return each year, but the danger of the destruction of the capital invested, at 10 per cent, deducting from that

(Testimony of C. L. Cory.)

the property in Shoshone County, the overflow lands in Kootenai County, the pole lines in Kootenai County, that would indicate a value of the Post Falls plant at \$916,710.14. That is based upon the earnings, however, for a three year period, is based upon the estimated cost of operation in part from a time since the plant has been in operation, and the estimated life of the elements. On the other hand, as an indication of this value, I would consider the physical condition of the plant at the present time, which I would like to call plant balance. The physical condition I would arrive at by figuring and considering the [401—117] investment in the three main items, dams, buildings and machinery, for each year since its construction, deducting each year the depreciation upon those elements, adding each year the new construction, which gives what is absolutely determined as the historic cost of the plant. Considering, then, the historic cost of the plant as of the date January 1st, 1911, excluding lands, of \$817,000—now, value and cost being entirely different terms, do not mean the same thing, and using the conclusions that I have, based primarily upon the historical cost to that date, also considering the physical value of the plant at that date, and considering as many years as are available, the net earnings, I should place the value of the plant.

The \$988,000 is determined from the cost of the plant, to which I have added, in order to convert cost of the plant into the operating plant as a going concern, 10 per cent, \$988,573.85. I added 10 per cent

(Testimony of C. L. Cory.)

to \$898,703.50, as an estimate between the physical plant and the plant actually in business, and as a going concern. There are many other items in that, but going concern in this case would be the principal item I should consider. That 10 per cent, of course, is an intangible matter. Approximately we add 10 per cent to Mr. Wiley's conclusion to cover these items of a going concern, with possibly this difference, that a certain interest during construction, should be depreciated at the average rate up to the present time. In this case there is a certain interest during construction set aside. We don't know upon what that will be charged. The average depreciation upon this plant is just a little more than 3.1 per cent per year. I have added that, which will be the [402—118] difference in the figures as given.

Cross-examination.

(By Mr. WERNETTE.)

I have been in the western country since I graduated from Cornell University, 2 months less than 20 years. I graduated from Cornell University in June, 1891. In August I went to Des Moines as Professor of electrical engineering in Highland Park College. I stayed there one year; I then came to the University of California on October 1st, 1892, and from that time I have been connected with the University of California. I am still connected with that institution in the capacity of electrical engineer, or professor in electrical engineering. I couldn't say that I spent the greater part of my time teaching in the University. I spent the greater part of my

(Testimony of C. L. Cory.)

time there during the academic year, which is about nine months; that covers from about the 15th of August until the 15th of December, and the 15th of January until the 15th of May. It is not necessary for me to be there almost continuously. During that time the hours actually given by me in the instruction at the University would be about 10 hours per week. That does not always cover a certain number of hours each day. It covers usually the work of instruction between 8 o'clock in the morning and 12 o'clock noon. I am seldom at the University in the afternoon, except for committee work or work outside of actual instruction. I have not opportunities to leave for any great length of time. I have not only opportunity but it is understood that I may leave the University at any time I desire, providing the work which I do is of an engineering character, along the line of my work at the [403—119] University. When I do leave I generally go in the capacity of a consulting engineer, or an advisory capacity. I did quite a little actual construction work for the corporations I have worked for covering a period of 12 years.

For the Northern California Power Company, in Shasta County, I was their consulting engineer during the construction of the plant, the capacity of which is about 30,000 horse-power, and at various times was on the ground to pass upon matters of construction of everything from the hydraulic development to the substations equipment. I drew all of the specifications for all of the construction of the



(Testimony of C. L. Cory.)

plant. For the Arizona Power Company, I was their consulting engineer in connection with the building of the plant to deliver power to Jerome, Arizona, the capacity of the plant about 60,000 kilowatts. I drew their specifications. I did not do all of this personally, but in my office, under my direction. For the city of Alameda, I have acted as their consulting engineer at different times since 1896, upon their municipal electric plant. For the Great Western Power Company, having a capacity of about 90,000 horse-power in water development, I have acted primarily for them in the investigation by them of the proper system of making rates, that, during the last year. The Yosemite plant, built in Yosemite Valley under my direction; the construction and all of the rest was let by contract, and I inspected all of the work that went in. Now, there might have been others, but I have not acted on what might be called public utility commissions, perhaps that would be covered by whatever happens to be the rate fixing body of the community. I acted for the supervisors in the City of San Francisco, during the years 1907, 1908 and 1909, and I acted for the city as consulting engineer in the annual [404—120] adjustment of rate for the telephone company. I should say the time amounted to in all three months, if it were all put together. That was scattered over some 3 years altogether. I did my work at the University during the entire period, continuously. I mentioned something in regard to the system of accounting and records kept by the Washington Water

(Testimony of C. L. Cory.)

Power Company. I first became familiar with the methods used by the plaintiff company in July of last year. I was asked by the company to undertake the direction of an inventory and an appraisal of the entire property of the company. I went over some of the books and some of the records, personally. I have been in charge in general, or directing the inventories or valuation or appraisement of the property since July 5th of last year; that work has not been completed. That work has been to include the Post Falls plant; but that is not completed. The inventory is, I should say, about 75 per cent of the work is completed. I have not done anything conclusive in the way of appraising the property as yet; I mean by that to say that in order to appraise the property the most important thing is to get at its present plant balance or present value. As an indication of that, the first cost, and if it is possible to determine that from the records which is known as the historical method of getting at the first cost, and that naturally requires an inventory, the first cost should not be taken by itself, and is not taken until it is checked with what would be a reasonable cost with the inventory and the unit costs. Now, after all that is done there are elements of value that must be taken into consideration in the appraisement over and above all of these other items which refer only to cost, so that that is what [405—121] I mean by coming to the closing up of the work. In other words, the value which I have placed upon the property, the full cash value, isn't conclusive at the present time. In con-

(Testimony of C. L. Cory.)

nection with the valuation work I have given since I have been in the vicinity in the past week a good deal of consideration to the value of the Post Falls plant. That is entirely independent of this work. I have given two figures, both of which I have given consideration, in arriving at a value of the plant, as defined by myself. There might possibly be others to be taken into consideration, when the work of appraising is completed, because I have not as yet taken the inventory of the Post Falls plant or any other part of the system, and attempted to finally give consideration to what would be called a replacement cost, as contrasted with the actual cost by their records. When I talk about the plant at Post Falls, I should include everything from the hydraulic development to the wires as they lead out of the high tension station at Post Falls, and that which is a necessary part in the operation or the production of the electrical energy from that plant. That necessarily includes the site. The plant at Post Falls as a plant would not include the reservoir, but the reservoir should be considered as a part of the plant in so far as it is required in the operation of the plant. I should consider it a part of the plant considering the plant as a going concern. I would consider the transmission system distinct from the plant but that would also be taken into consideration, if you will speak of this as an electrical generating and distributing and transmission system, but the plant is usually confined to the [406—122] generation of the elec-

(Testimony of C. L. Cory.)

trical energy and the distribution and transmission to the system.

While I have been working at this work I have learned of the method of bookkeeping or system of accounting used by the Washington Water Power Company in their work. I have appraised several plants outside of the one I am appraising at the present time for the plaintiff company. I have appraised the entire system of the Pacific States Telegraph & Telephone Company in San Francisco. The entire plant and system of the Los Angeles Gas & Electric Company, at Los Angeles. The entire system of the Santa Barbara Gas & Electric Company in Santa Barbara, for the City of Santa Barbara. The Modesto Gas Company, for the City of Modesto. The Vallejo Electric Light & Power Company, for the City of Vallejo. In appraising that property one of the ideas was of finding out what the cost of reproducing the property at that particular time would be; those were the instructions given to me; and for the determination of a reasonable rate in connection with the work for the City of San Francisco, on the telephone company's property, and for the purposes of taxation.

The particular ones I appraised for the particular purpose of taxation was the plant of the Pacific States Telephone & Telegraph system in San Francisco, and the Los Angeles Gas & Electric Company, for the purpose of determining the reasonable rate for gas and electricity, and also for taxation purposes. For the City of Vallejo, in connection with

(Testimony of C. L. Cory.)

the Vallejo Electric Light & Power Company, for the purposes of a reasonable rate of taxation. The Santa Barbara work [407—123] was solely the matter of rates. On the Modesto Gas Company for the City of Modesto, for the determination of possibly the reasonable rate for service, and also for taxation.

I have read a great deal of literature in connection with hydro-electric plants and electrical works of various kinds. I do not know that Foster is a standard authority. I know Mr. Foster very well. I would not want to say he is not an authority, nor would I say he is an authority. Mr. Foster's work has been primarily that of compilation. He is the author of one of the best electrical hand books we have. I would say this, that Mr. Foster and his publications, his compilations, ought to and certainly would be considered among the first authorities upon valuations or appraisals. I would say that Daniel W. Meade is considered an authority on water power engineering; he is professor of engineering at the University of Wisconsin. He has been largely identified with the work of the Wisconsin Railway and Tax Commission. Mr. Foster is connected with the staff of J. G. White & Company, a large engineering firm having to do with construction of large installations and valuations, and general work. I have been a student and have read a great many reports of railroad commissions and public service commissions.

Depreciation and amortization are two entirely



(Testimony of C. L. Cory.)

different things. Amortization is defined, I think, as the extinction of a debt. As applied to valuations, amortization means this, that if a certain expenditure has been made which should be carried indefinitely to capital account, an amortization fund is established. I will give you an illustration of that. If it should be decided by the courts or a commission [408—124] that an investment of a public utility company was unwise, not justified, and injustice to the people, that public utility might be—some of them have been—instructed to establish an amortization fund, which at the end of a certain period will extinguish this investment, and the rates will be made large enough to set aside this fund, but amortization is a fund which is set aside to extinguish an expenditure for some certain thing. Depreciation is a fund which is set aside to maintain that particular element, to the greatest extent. Amortization is toward eliminating that; depreciation is toward the upkeep of it. [409—125]

**[Testimony of George B. Colpas, for Plaintiff  
(Recalled—Cross-examination).]**

GEORGE B. COLPAS was recalled to the stand and in cross-examination by Mr. ELDER testified:

I cannot give you the net earnings of the Spokane Washington Water Power Company plant; I haven't the data here for that; I cannot give the net earnings after deducting operating expenses, maintenance and administration. If when you speak of net earnings you mean the

(Testimony of George B. Colpas.)

net earnings by the gross earnings less the operating expenses, maintenance and administration, I would say that we do not segregate the net earnings of our Spokane plant from the other power plants of the company. I take account in our books of the amount of depreciation. We do not depreciate our individual plants, we depreciate the entire plant. In arriving at the cost of the plant at Post Falls not one cent for depreciation has been figured on that. Every year I take account in our books of depreciation on the entire property. The \$1,068,844.90 is the actual cost of the plant without depreciation. Every betterment was charged to the plant—what was made on the plant was charged to that account. We have a sinking fund for the purpose of taking care of the bonded indebtedness.

**[Testimony of D. L. Huntington, for Plaintiff  
(Recalled—Cross-examination).]**

D. L. HUNTINGTON, recalled, and upon cross-examination by Mr. ELDER, testifies:

We paid the Cable Miling Company \$40,000 for their property. I do not remember exactly how much horse-power they had there; it was somewhere between 300 and 400 horse-power; we began furnishing power to the mines in the summer of 1903; we furnished that power from Spokane until we completed the Post Falls plant; then we transferred the power we were using in the mines generated in Spokane to the various businesses in Washington to which we were furnishing power and used the

(Testimony of D. L. Huntington.)

[410—126] Post Falls power after that for the Coeur d'Alene mines in Idaho; one of our transmission lines runs from Spokane, or, at least, there is a line running between Spokane and Post Falls from which a branch has been cut off to the Coeur d'Alenes which we call our No. 1 line, and there is another line runs directly from Post Falls to the Coeur d'Alenes, which runs along the north end of the Lake Coeur d'Alene which is our No. 2 line. After deducting the operating expenses, and depreciation, and losses from bad debts and proof of loss entries and maintenance, all of the things that go to make up the costs of operating, then the bond interest is deducted and the remainder is available for dividends or surplus. The market in Eastern Washington is gradually growing for electricity. It is not growing very rapidly now, but it has grown quite rapidly up to this year, and also in Idaho.

(Document marked Exhibit 1 for Identification.)

Defendant's Exhibit No. 1 for identification is a book published by and under the direction of our Company.

(Document marked Defendant's Exhibit No. 2 for Identification.)

Defendant's Exhibit No. 2 for identification looks like a copy of one of the annual reports that we printed. It is either one of them, or one printed exactly like it. I think it is one of them. I cannot remember the figures; I wouldn't question it myself.

(Testimony of D. L. Huntington.)

Redirect Examination.

(By Mr. POST.)

The Cable Milling property which we bought for \$40,000 consisted of certain land and water rights and the flour mill. There was a flour-mill on this plant. I do not know how many acres of land there was. I do not remember whether we had bought the Post Falls property at the time we [411—127] built the transmission line No. 1. We bought the larger part of the Post Falls property from people who were operating in mines in the Coeur d'Alenes, Finch & Campbell and R. K. Neal, etc., and upon the understanding that we were to develop Post Falls for the benefit of those mines up there. I think we made a contract for power with them and they concluded the purchase of the property about the same time, because I remember there was a stipulation that we should furnish them power or they wouldn't want to sell us the property, and the sending of electricity from Spokane was temporary until we got the Post Falls plant completed. I have brought up the deeds and contracts we have in question to the deal with Martin and Strathan; these three papers here are the Strathern instruments, and these two are the contracts and deed with Martin.

(Documents marked Plaintiff's Exhibits Nos. 10, 11, 12, 13 and 14, which were offered and received in evidence.)

One piece of this land had on it some kind of a mill. The Plant Company moved that mill or paid the expense of moving it, costing some \$15,000. I

(Testimony of D. L. Huntington.)

acted for the company in the purchase of the other property there at Post Falls, and I think from my experience knew what the value of such property was at that time. The value of the Martin property over and above the \$15,000 paid for moving the mill was about \$30,000, because if we had destroyed his mill and given him nothing in its place, the compensation would have been greater. As a matter of fact, I think we negotiated with Strathern for the whole property and should have fixed it up with Martin; that is what I remember now. I fixed the value of the whole purchase of the Strathern and Martin property at \$30,000 in addition to what we paid him to move his buildings. *The contract called\** [412—128]

Recross-examination.

(By Mr. ELDER.)

I did not testify that I considered 375 horse-power of electricity, delivered perpetually, to a person, worth only \$30,000 in 1903. We gave 375 horse-power of electricity in perpetuity besides paying \$15,000 for moving the mill for that property. I should think the horse-power delivered in perpetuity would be worth more than \$30,000.

[Testimony of C. L. Cory, for Plaintiff (Recalled—Cross-examination).]

C. L. CORY was recalled upon cross-examination by Mr. WERNETTE, testified as follows:

Beside the straight line system of figuring depreciation, there is a method commonly known as the

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\*Remainder of sentence does not appear in original certified Transcript of Record.



(Testimony of C. L. Cory.)

curved line of depreciation, the difference between the two being this: Having estimated the ultimate life of the plant you can either set aside each year the same amount, assuming the depreciation corresponds to the life of twenty years, then you may set aside as a depreciation fund 5 per cent per year from the day the plant is completed; that is the straight line method. The curved line method would be to set aside a smaller amount during the first part of the life of the plant, placing each year what you set aside, either theoretically or practically, at compound interest, to the end that at the end of 20 years there will have been accumulated by that time, as the fund grows and as it draws interest also, an amount equal to the total value. I would arrive at the life of a plant such as the plant of the Washington Water Power Company located at Post Falls, by taking into consideration, first, the life of the different parts, as estimated, based on experience, the progress of the art or the business, and the life of the market supporting the plant, the life of the income coming from such market, the possibility of the investment, either [413—129] in part or in whole, being superseded by more economical methods of developing energy, and matters of that kind. In arriving at the estimated value of the plant, I took into consideration what the life of the Post Falls plant was. I considered the depreciation on the dams to be 2 per cent. My estimate is that the dams would in all probability be useless or of no value for the purposes for which they were built at the end of 50 years; that the concrete will exist and be a physical

(Testimony of C. L. Cory.)

structure, I haven't any doubt, maybe for 100 years. In fixing the value of the plant I would take into consideration the usefulness of the plant at the end of 50 years. I believe there is no rule that has ever been formulated as yet whereby it can be figured that depreciation on dams such as the Washington Water Power Company had at Post Falls depreciated to the extent of 2 per cent per year. The decision upon which I base my definition of depreciation was from the Supreme Court of the State of Oklahoma in the case of the State of Oklahoma vs. Pioneer Telephone Company. I am merely referring to certain decisions that have been compiled in Mr. Foster's book, *Engineering Valuation of Public Utilities and Factories*, the edition of 1912. Also what is generally known as the Kansas City Water Works case in the opinion of Justice Brewer. Perhaps one of the principal and noteworthy decisions is that of Justice Peckham in the case of *Wilcox v. Consolidated Gas Company of New York City*. I think those are all given in Foster's work. They are referred to inasmuch as he has quoted at length from many decisions. I made a very thorough examination of the plant of the Washington Water Power Company at Post Falls and also examined their power line the whole length of the line. The physical life of the poles used in power-lines or pole-lines depends a great deal upon climatic conditions of the country [414—130] in which the poles are placed, the useful life, not so much as with any particular quality of pole. I would say in general that

(Testimony of C. L. Cory.)

the physical life of poles used as poles in the ground would be somewhere around 10 years. It would depend upon the size of the poles that were used, the strain under which the pole was operating, and depends upon the material of the ground in which they are placed, and so on, and the character of the wood. Cedar, which is commonly known as Idaho and Washington cedar, being unquestionably the best type of pole to use. I did not go along the power lines of the company from Post Falls up to Shoshone County and examine those poles to find out what the conditions were under which the poles are being placed. I examined them only in passing along in general over their entire property, but I have not made a physical examination of their pole-lines to dig into the ground and find out the conditions under the ground at all. And when I made the statement yesterday as to the average life of a pole-line, I had particular reference to the various classes of pole-lines of the Washington Water Power Company, and which means that at the end of between 12 and 15 years all of those pole lines would have to be replaced.

Last year, when I began the work of ascertaining the best method of getting an inventory of the entire property of the Washington Power Company, I very carefully examined the costs of various kinds, primarily to ascertain the general policy that the company had pursued in keeping the property in an operating condition, in other words, if an expenditure was made I wanted to, in my own mind, decide

(Testimony of C. L. Cory.)

as to whether that expenditure should have been charged to maintenance, should have been charged to depreciation, should have been charged to extensions, or capital account, and in doing that I made a very careful investigation of the maintenance charges for the years 1909 and 1910, and up to July 1st, 1911, of what might be [415—131] called the newer pole-lines of the company. Those are, I think, about an average of 40 to 45 feet; also of the older pole-lines, something like 35 feet; also of the steel tower line running from Little Falls plant into substation No. 7, 29th Avenue substation. I went over the records of the company and found in a general way for those years 1909, 1910 and 1911 that the maintenance charges would vary from year to year, but over that period would average about \$100 a mile. The line between Post Falls and the 29th Avenue substation in Spokane, the average maintenance charge was about \$3,300, and that line is 35 miles in length, and that with the same work that I have constantly done in attempting to arrive at whether the costs of operation of a utility were fair in these other valuations, tried to get at the matter of whether certain expenditures during each year were properly maintenance, or should have been charged to capital account, in getting the cost of operation—my experience in that sort of work and the character of these lines, where they are located, and so on, led me to that conclusion, and I therefore testified to that effect. I do not think I could say that I based my answer mainly on the records and files of the corporation, but I certainly

(Testimony of C. L. Cory.)

took in to consideration the facts which the records showed with reference to their pole-lines to indicate to me the local conditions. I should consider that an average rate of depreciation of 8 per cent per annum upon the entire structure, including wire, cross-arms, poles, and the different classes of pole-lines, taking the average of all of those into consideration. On some of those pole-lines a greater rate of depreciation ought to be charged, and others less, but the average would be about 8 per cent. I stated yesterday that a fair maintenance charge on the dams at Post Falls plant would be approximately \$3,000. I arrived at that amount after considering the maintenance [416—132] the dams such as those at Post Falls, that are used very considerably for the control of water, the gates, and structures of that kind, and by taking into consideration the actual maintenance charges that have been found to be expended upon that structure, I have also taken into consideration maintenance charges for dams with their gates and control devices, of which I have knowledge, and the maintenance charges that I am familiar with and know of in other places of similar construction, concrete dams entirely, with control gates and so on. I place the percentage of depreciation on the actual cost in the first place. The depreciation is deducted constantly from the first cost, and is usually expressed in the percent of the first cost. I do not think I gave really any consideration of the first case of the South Channel dam at Post Falls; the maintenance except in isolated cases is quite independent,



(Testimony of C. L. Cory.)

possibly, of the first cost. I am quite sure that I did not have some particular amount to figure on at a certain per cent to arrive at the sum of \$3,000. To assume that the cost of maintaining a thing is a percentage of its first cost would be the wrong principle absolutely in my mind, that is, as a method of arriving at it. It might be a per cent, but as a method of arriving at it, otherwise we would say that a concrete dam, the per cent of maintenance would show that maintenance very much more than the corresponding percentage of a wooden crib dam, for instance, which would be the wrong principle. Except as the item of maintenance would enter into the cost of operation, it is necessary to ascertain and determine what the maintenance is in order to arrive at the actual value of the plant at any given time. I would consider 5 per cent as a reasonable percentage of depreciation on machinery such as water turbines and generators such as the Washington Water Power Company [417—133] have based on the ultimate life of 20 years. I should say the fair return upon the investment should be not less than 10 per cent of the investment, annually. A great many things would enter into my conclusion in the matter. I think one of the foremost would be the principles laid down in the Consolidated Gas case, the decision of the Wisconsin Commission dated March 8th, 1910, upon the Madison Gas & Electric Company case, the decision of the St. Louis Commission in the United Light & Power Company case, the decision of the Maryland Commission, the decision of the Commis-

(Testimony of C. L. Cory.)

sion in Chicago on telephone rates. I have a great many others in mind. By referring to those decisions I do not mean that the investment is entitled to 10 per cent. In the Consolidated Gas case there is no statement as to what is a fair return, but the principles upon which a fair return should be brought. Those principles are, that there first must be a return of interest on the investment, which may vary from 4 per cent to 7 per cent, as outlined in those various cases. Over and above that, to cover the hazard of maintaining the capital invested, to cover the hazard of competition, to cover the hazard of any fluctuation in the gross revenue, due primarily to difficulties such as labor difficulties, or matters of rate regulations, public utilities, there is a profit definitely and specifically indicated over and above any interest rate, this profit varying as I remember the Madison case specifically,—the profit there set forth is between 2 and  $2\frac{1}{2}$  per cent, over and above an interest rate. In other words, in this case my conclusion is based upon those decisions. There are some decisions of the Wisconsin Commission where 10 and  $12\frac{1}{2}$  per cent return has been held as reasonable. Based on that, and based upon the character of the market, and particularly the mining load, I have come to the conclusion, and state, that a rate *less than\** [418—134]

There are certain instances in the reports of the Wisconsin Commission case where 10 and 12 per cent are allowed as reasonable. I think those are

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\*Remainder of sentence does not appear in original certified Transcript of Record.

(Testimony of C. L. Cory.)

rather exceptions than the general rule. In the majority of cases the rate is a good deal less, but in the Madison case, the St. Louis case, the Chicago Telephone case, in each where 8 per cent was held as reasonable, there certainly was no question as to the fact that the market was there for all time, and was increasing, and the hazard of doing business was lessened by the entire exclusion of possible competition. The actual rate of interest which an enterprise has to pay for the money necessary to construct a plant will not protect from the reduction in the value of that property by means of competition. I can illustrate that very definitely. Suppose a company issues bonds to extend its electrical transmission system, suppose a market, such as actually occurred in the Central Colorado Power case, is ended, the integrity of the investment is gone.

In answer to your question as to what hazard would they have if the parties that loaned the money did take over the plant, I say that if the individuals operating the plant had no interest whatsoever financially, they certainly could not lose; the bondholders would lose. If you will consider the protection only of those outside of the bondholders, the rate of interest which the bondholders give for the money which was invested in the property should be the proper rate of interest. There are other things to be considered.

It isn't going to be a good thing to build a public utility and have that public utility serve a useful purpose in a community, and, for any reason, because of inadequate considerations of interest and

(Testimony of C. L. Cory.)

return, cause that utility to become bankrupt. The mere fact that a water power company generates electrical power and a mining company purchases that electric [419—135] power, does not alter the fact that the line between the interests of these two is purely artificial. The ultimate economy in the development of the natural resources of any community must depend upon the mutual operation of such people as electrical power companies and mining companies and transportation companies. A reasonable rate of return must be based upon the fact that the utility can continue to do that which is necessary for the development of natural resources, and for that reason, to my mind, would not be reasonable. Before the rate of interest is changed or figured out at all, that the administrative charges, the maintenance, the depreciation, the interest on the money invested, is taken out first before we start to figure as to what the fair rate of interest should be. Under the circumstances referred to, the rate of interest charged by the bondholders would not be a fair rate of interest, because conditions may arise, and actually have arisen, where in the conduct of such business, it is necessary to get a rate of return which will retire the investment, which is exactly the case where a mining district is being worked, and you cannot depend upon that mining district continuing for all time.

I did not take into consideration, nor is my purpose to take into consideration, the rate of interest paid upon the bonds or stock, or the capitalization, in



(Testimony of C. L. Cory.)

stating that the Washington Water Power Company was entitled to 10 per cent on the investment. I would not first take the 5 per cent or the interest of the corporation out of the gross receipts. I would not consider that 5 per cent at all, because it is very possible the bonded indebtedness might bear an absolutely wrong proportion to the value of the plant. I figured the net revenue in arriving at this percentage. The interest on the bonded indebtedness was not taken out before I could arrive at the net income. In arriving at the true valuation of the [420—136] property such as the Washington Water Power Company, one of the most important items would be the actual cost of the property, if that can be determined. That is not conclusive because the value of the property might be much less than its actual cost, or it may be very much more, depending upon other conditions. Another element would be the cost to reproduce the property. A most important element would be the physical condition, the operating condition of the property at any time, sometimes alluded to as the existing value, sometimes called the cost less depreciation, sometimes called the depreciation cost, and most always now, I think, called plant balance at any time. The permanency of the market should be given considerable consideration. The fact as to whether the market can, with their operations and their expenses, continue to pay a rate which has been in existence. Certainly the gross revenue for as many years as are available and necessary, the expenses for as many years as are available, the maintenance charges, all



(Testimony of C. L. Cory.)

expenses, then the possibility, if there be any, of appreciation in the price of the commodity produced. Similarly, the possibility of there being a decided lessening in the value of the output for any reason, due to the fact that they do not use them any more, or the fact that there is some cheaper method of producing something else which takes its place. There may be, in general, other things that I certainly would take into consideration, but they are possibly the principal ones. I most certainly take into consideration the value of the going concern. I considered the 10 per cent in addition in this case to the existing value. In other words, the depreciated cost or the plant balance at this time. There is a very great difference between what the authorities consider as the value of a going concern, between a manufacturing establishment such as a factory, and a hydro-electric power plant, such as that of the Washington Water Power Company. There is a difference in [421—137] this way, usually in rate-fixing matters the value over and above the physical plant is sometimes determined by using the expression "cost of development business." Now, an ordinary large metropolitan newspaper would certainly have a very small value, physical plant, but the value as a going concern, and the value perhaps of goodwill, might be many times the cost of anything which it really owned, physical ownership. Now, on the other hand, in a manufacturing business, the value of goodwill might come in, the value of going concern would come in, perhaps to a lesser degree. Goodwill is perhaps

(Testimony of C. L. Cory.)

more that which causes one by personal preference to go to some particular hotel or take some particular newspaper. Now, when it comes to a hydro-electric plant such as this, the going concern value must be measured by the character of the market which it has, the value which the plant has, because it is not only physically existent, with no customers and no revenue, but it is established, without any question, with a revenue; that revenue can be depended on for a long period of time, or it can't be depended on. The revenue is figured as regards the rate, or it may not be figured, because something may take its place. Those would certainly be items. The going concern item and percentage I have no doubt may be found anywhere from nothing to 100 per cent. It would depend upon the cost, but they might have expended a good deal and yet be just on the point of having something substituted for their product. That would be one of the principal items that would have to be taken into consideration, but I think it would not be quite as important as the other. In arriving at the value which I gave you this morning, I took into consideration all of these elements. I included in that the fact of the company having a reservoir covering over 45 square miles of lake, besides a great reservoir basin in the St. Joe, St. Maries and [422—138] Coeur d'Alene Rivers, besides considerable property which is allowed to be overflowed by reason of the facts *if* the company having easements on that property. In attempting to arrive at the value of the plant from the standpoint of its present

(Testimony of C. L. Cory.)

physical condition, I did not take into consideration the reservoir, the cost of the reservoirs, or the cost of making the reservoir, whatever that may be, outside of the dams. In attempting to arrive at the average net revenue for a number of years and using that as a method to capitalize all of the property in Idaho, I did take into consideration the cost of the lands, and, in fact, so far as I know, everything which is invested in Idaho, and deducted from that capitalization, to get at an indication of the value of the Post Falls plant on the basis of its income. I took into consideration that there was a reservoir, because if I had not, I would have come to the conclusion that this plant will have capacity only when other plants have capacity and the very time when electrical energy is most needed, when the minimum flow of the stream comes alone, this plant would have practically no capacity at all. I did not take into consideration the fact of that reservoir which is created by their plant at Post Falls as to the benefit that plant gives to the plants at Spokane and Little Falls, any more than I took into consideration the value which the stored water during the summer might have to anybody who wanted to utilize it. I placed a value on the reservoir in arriving at my full cash value which I gave this forenoon in the method of adding together all the investments in order to deduct for this investment. I did not use it any other way. I did not have any specific per cent of the total or any specific amount that I created or allowed for the reservoir in arriving at the value. I took

(Testimony of C. L. Cory.)

what has been introduced here as evidence as to the assessed value, I believe, of certain lands required for the [423—139] reservoir. I took it as a factor increasing the output of the plant to the extent that the average output of that plant has been at the rate of about 7,000 horse-power, and that it could have been nothing like it if there had not been this reservoir behind it. The gross income is reduced by the maintenance cost, the depreciation cost, the salaries and wages represented by operation, the taxes, the cost of administration or management; that is deducted from the gross revenue, then the net income is the difference between the sum of those last items and the gross. I think they are the only items I figured in deducting from the gross to arrive at the net income. I took the average of the net revenue for the years 1908, 1909 and 1910, capitalized that at 10 per cent in order to arrive at the total Idaho matters, deducting from that certain items in order to get a sum which is an indication—not final—but one of the indications of the value of the plant. I deducted the investment in transmission lines and substations in Shoshone County \$262,585 in arriving at the amount given. That is the value as existing on January 1st, 1911, that is the value as set forth here in testimony, deducting the depreciation up to that time. That is the value I took in figuring my amount. I have also deducted the overflow. The figure which I use was \$175,851 for the overflow lands as assessed and the pole-lines in Kootenai County, as assessed, \$183,000, the substation at Cataldo on January 1, 1911, \$20,880,



(Testimony of C. L. Cory.)

and nothing more except that in my statement this morning I did not know the average life of the pole-lines in Shoshone County, and I took, in testifying this morning for the amount deducted, an amount which was approximately—from present reproduction cost, which is slightly different from the actual cost as testified to here, and taking off the depreciation up to date for that. I merely took the value of these various pieces of property from the amount that was [424—140] depreciated on January 1, 1911, from the amount that was capitalized and I deducted from that the capitalized income at 10 per cent. The principal is that, and there is a certain gross net revenue, that is, from all kinds of business. Now, there are certain investments outside of the plants. In order to get this net revenue, of course it is required to have these other investments; by deducting the sum of those investments from the average net revenue for three years at 10 per cent, which is \$164,116, and so on, I get an amount which is an indication of the value of the Post Falls plant, based upon its earning capacity. I did not figure those transmission lines, substations and property in Shoshone County as a part of the Post Falls plant. There are two things necessary for this plant, to conduct the business in Shoshone County and to get this net revenue, if you please. We will say the Post Falls plant is one part of it, and certain transmission lines and substations and other things. Now, in order to get at the value of a figure which will indicate the entire earnings which will indicate the value of the plant on



(Testimony of C. L. Cory.)

the basis of its earnings, I have taken the entire earnings, which will cover and must cover all costs including generation and operation of these pole-lines. Now, then, we get a net revenue, which, capitalized, represents a figure which indicates the value of all of the property in Idaho. Now, I deducted from that figure the sum of other figures, in order to arrive back at the value of the plant, or a figure to indicate the value of the plant, on its earning capacity. In other words, I credit this value in Shoshone County at the same rate I credited the value here and all of these other items in the same way. I did not deduct the lines running down to Spokane and the distribution system in Spokane from the capitalized net income of the plant, but I deducted all the revenue that comes from the plant in that direction, in order to get [425—141] the net revenue in Idaho. If it is fair to deduct the whole working operations in Shoshone County where a part of the power is sent and distributed, it would be perfectly fair, and only another method of arriving at the same result, to subtract the fair value or cost of the distributing of the power in Spokane and the power lines running to Spokane, but in doing so you would not take the net revenue in Idaho, but would take the net revenue from all the sources of the plant. You would arrive at practically the same result. You would also have to consider the cost of that distribution and of all of these other items. I do eliminate then all of the income of the plant except that coming from the mines. I credited the amount of the power that goes to Spo-

(Testimony of C. L. Cory.)

kane at the rate of .6 of a cent per kilowatt hour, thereby reducing the net revenue of the plant given, as a result, the net amount, and after considering the various items that were necessary to conduct that business in Idaho. I mean by reducing the net revenue by that amount we can consider the Post Falls plant as having a net revenue which may be divided into two parts. The revenue which comes from the current which goes to Spokane and the net revenue from the current which is used in Idaho. I have considered that which goes to Spokane if you consider the revenue from all sources from the Post Falls plant. In this statement I have not considered it. The results would have been exactly the same. There would have been added and subtracted the same amounts. I gave no figures as to what I considered was the cash value or full value of the plant. I gave the figure \$916,710.14, but I modified the question of the depreciation on the interest during construction. That was one figure I gave as a figure indicating the value of the plant based on its earnings. I gave another figure of \$988,573.85, as indicating the cash value of the plant based [426—142] upon its present physical condition, adding to that 10 per cent for a going concern. \$988,000 includes the 10 per cent. I am trying to give you the two figures at which I arrived. Now, on the basis of the present physical value of the plant down there, to which I have added 10 per cent for going concern, I arrived at the figures \$988,573.85. \$898,000 is increased by 10 per cent of itself in order to get \$988,000. I will

(Testimony of C. L. Cory.)

answer that in another way. \$898,708.50 added to 10 per cent of itself, or \$89,870.35, gives as a result \$988,573.85. The figure \$817,000 does not include the cost of the land, which does not depreciate, which I considered was not a depreciable quantity. That is, the \$817,000 is the value of the plant without the land, of the depreciable part of the plant, and the \$988,000 takes land and everything else. I took the value of the land at \$109,272.44, taking the present physical value of the plant as estimated by Mr. Wiley as \$817,402.79. If you add the price of the land to that you get \$926,675.23. Then there would be 10 per cent added to that for a going concern which amounts to \$1,018,742.75. I want to be distinctly understood as testifying that those are figures as indicating a value, and not my final and ultimate conclusion as to what the value would be. That is, perhaps, a little too far to go. No interest of any kind had been deducted from any sum in order to arrive at that net revenue. I take into consideration the amounts that were given here as net revenue, that is, I do not take account of the interest in arriving at the cost of construction. That is another matter than arriving at the net revenue.

Redirect Examination.

(By Mr. POST.)

Taking into consideration the value of the plant based upon the ability of it to earn, or its earnings, and also taking into consideration in determining the value of the [427—143] plant, its present physical condition and that it is operating concern, I be-

(Testimony of C. L. Cory.)

lieve the value of the plant to be approximately \$975,000. In figuring the Shoshone county transmission lines at \$264,585, I have depreciated the cost of it \$82,140, approximately 30 per cent. I think no public body, such as a legislature body, under statute, has fixed that item of 10 per cent as a going concern. I have not taken into consideration as a hazard of the business that one of the hazards of a public utility is the fact that a public utility must keep going whether it makes money or not.

Recross-examination.

(By Mr. WERNETTE.)

In arriving at the depreciation on the Shoshone county transmission lines, which amounts to \$82,240, I did not take into consideration the betterments which have been made from time to time on those transmission lines. I considered that the lines had been in course of construction since the first Coeur d'Alene No. 1 line was built. Independent of any percentage of depreciation, I considered the Coeur d'Alene line No. 1 as approximately of little value, and I considered that as a very large factor. The average depreciation covering that period is based on 30 per cent depreciation with the average life. I did not take into consideration anything which would be in the nature of replacing entirely parts of the transmission, and therefore making its value greater now because of such replacement. I did not consider anything in the way of betterments or salvage.

On examination by the Court, witness proceeded:



(Testimony of C. L. Cory.)

In making my calculations, I did not make it by allowing, as against the present value of the property, the total depreciation according to the annual percentage that is adopted; in other words, the property has been built five [428—144] years and the annual depreciation is 2 per cent. I did not deduct 10 per cent from its original cost to get what I call its present depreciation value, because what one must do, and what I did was to take the value of the cost of the plant up to a certain time, say January 1, 1908, and take the depreciation for that year and carry that out. In other words, it wouldn't average 10 per cent, because, for instance, there was an increase in the value of machinery in 1910 in a large amount. I allowed 2 per cent depreciation on the dam. The dam has been built 10 years and I deduct 20 per cent from its cost and get its present depreciated value, and in considering the revenues of the present years, for instance, I deduct 20 per cent for depreciation as an item of expense, and that is on the theory that the whole dam would become worthless at the end of 50 years. I think that is fair. The 2 per cent that was deducted 5 years ago, supposing it was \$5,000, is set aside for the purpose of doing anything that may be necessary during the 50 years or not used at all until the end of the 50 years to replace and make good that dam, or something which will do the same thing; otherwise, if it be true that if at the end of 50 years the dam will be deserted and not used for the purpose for which it was intended, you have only been getting a rate



(Testimony of C. L. Cory.)

of interest on the money and allowing the capital to be lost in the transaction. If you set it aside and invest it to the end of 50 years, figuring by the curved line of depreciation system, in which you would not set aside as much as 2 per cent during the first year, you will have 2 or 3 times the original capital, depending upon the amount of interest. I consider the life of the plant 50 years and allow 2 per cent per year, because it is a false assumption to assume that we can set aside a sum year and hold it intact. We find in actual practice that probably at the end of the first or second year we should go to this fund and get some [429—145] money out in order to overcome the depreciation during that period, and you should not calculate that the plant has depreciated 10 per cent at the end of 5 years, providing that has actually been done. I figure both in this case to get the full amount of depreciation, and yet take out the full amount of percentage of depreciation, because when that dam was built there were certain methods that had been developed then for the control of the water. Those methods have absolutely been superseded now. Without question, this fund, if it had been set aside at 2 per cent, must go to it in order to maintain the dam properly and any money expended in that direction should be added in order to determine your physical plant. That 2 per cent is operating costs; depreciation is an operating cost. We charge it off to cover depreciation. At the end of any given period if that depreciation has been used as it should

(Testimony of C. L. Cory.)

be, you are quite right. The plant will maintain at the end of each year its 100 per cent, and if you do not do that then the company should be charged interest on this 2 per cent. If this 2 per cent, for instance, had been set aside, then the company would have its present physical condition and some money set aside, which ought to be included. If it was not expended then it would have all the money plus the interest on it. If it had been expended, they would have the plant in its original condition so one or the other theoretically should not be included. The present value of a plant of that magnitude, to my mind, is not to be given so much weight. The theoretical value of the plant, counting its depreciation, would be its 100 per cent valuation. In other words, it would always, if this were done and properly charged each year, if we were right in our estimation, have its original value. The company would maintain its plant in its normal condition if it were physically possible to do so, so that there would be practically no depreciation or deterioration [430—146] in the physical plant. There should not be so much allowance made for future obsolescence as there has been in the past. I don't think as much in the future as there has been in the past, if you take a long period of perhaps 20 years, because there has been great obsolescence in that time, but it is certainly true that the changes in the size and magnitude and economy of such plants as these within the past three and four years has made obsolete without question machinery that

(Testimony of C. L. Cory.)

is not more than 5 or 6 years old, and we do anticipate obsolescence as a most important factor, particularly in all of those elements pointing to the electrical phases, due to the increase in voltage, requiring different, much more expensive installation, but much more economical; but I should say, from my experience, my judgment, if you please, that the growth and progress is so great at the present time that it is a fact that we are discarding apparatus which was considered the largest at that time built, and casting it aside and scrapping it, that is not over five or six years old. I would want to make a considerable allowance for that in a plant of this kind for this reason; investigation of the cost of producing electric power made by myself indicates that the maintenance and operating cost of the Post Falls plant is as much as 4 times in proportion to its output as the Little Falls plant, a plant built but a few years later. The maintenance and operating cost of the Post Falls plant is very much larger, due to these machines. For instance, the Post Falls have a capacity of about 3,000 horse-power. Little Falls have a capacity of three times that much. They are more modern machines, require very few attendants. In the whole matter we are striving for economy, and it is unquestionably true, and it is the case, that plants of 10 and 12 thousand horse-power are being shut down and not operated because substitute power can be delivered [431—147] from larger plants under better operating conditions, the reason being this, that the state of

(Testimony of C. L. Cory.)

the art, say 5 years ago, was such that very large amounts of money necessarily could not be put together, and it is developing all the time. We have 30,000 horse-power generators to go into the Great Western Power Company's plant, two of them. It is estimated that the maintenance charges on those machines will be such that they will shut down probably 10 plants now in operation. Those are the things that cause us to give most grave consideration to obsolescence, and when a pole-line is built it doesn't pay to pull it down; the cost of pulling down the poles and pulling the wire off the poles is such that it doesn't pay to pull it down. In other words, obsolescence should be one of the large items in the depreciation. And in turn, by substituting the new devices for the old, you would reduce your cost of operation and maintenance. The whole point comes down to this: how can we most cheaply produce the kilowatt hour for some particular purpose, or as horse-power? If it is more economical to pay the operating expenses of the plants that are becoming obsolete, we will do that. If it is more economical to spend the money to put in 30,000 horse-power units, we will do that and abandon the old. Exactly the same thing to-day occurs in railroad transportation; the size of the locomotives; the amount invested in track, bridges, etc.

Examination by Mr. POST.

Take, for illustration, a new concrete dam after a year has elapsed. Although there is nothing to be done to that dam, and it is an efficient dam, it has

(Testimony of C. L. Cory.)

still depreciated. Assume that by using this 2 per cent or any other per cent you have \$5,000 in the fund, it may be by the time you had that \$5,000 in the fund you either want to use the \$1,000 or \$5,000, [432—148] or perhaps \$20,000 on account of something that has happened to the plant, to be used for replacement. That depreciation fund is not a fund to be used at the end of the period of time, but is to be used whenever the thing happens requiring a replacement. And in electrical plants in the present state of the art, it is impossible to determine when there will be a call upon that fund for replacement purposes; it is but an estimate. It is unquestionably the fact that that is one reason why they use the straight line method instead of the curved line method of figuring depreciation.

Examination by Mr. WERNETTE.

I don't know whether the amount that is deducted by depreciation is invested by the company. The custom is different with different cases. I can give you specific instances of what the custom is.

[**Testimony of R. L. Rutter, for Plaintiff.**]

R. L. RUTTER was called as witness on behalf of plaintiff, testifying as follows, on

Direct Examination.

(By Mr. POST.)

My name is R. L. Rutter. I reside in Spokane; have resided there for 20 years. I am a banker, connected with the Spokane & Eastern Trust Company, as General Manager, and have been connected



(Testimony of R. L. Rutter.)

with this bank for 18 years. I have been general manager for 3 or 4 years; I have also been secretary. That is a trust company. I am also president of the Western Union Life Insurance Company. That company makes investments in loans secured by first mortgages on city property and country property in Idaho and Washington. It has loaned over one million dollars in that kind of loans, and has now outstanding in the neighborhood of \$563,000. I cannot tell what proportion is in Idaho, a considerable part is in Idaho. [433—149] Those loans last year were at the rate of 8.2 per cent. The property is farm and city and town property. The Spokane & Eastern Trust Company also has mortgages on real estate and at the present time has about \$450,000. These mortgages are on property in Washington and Idaho on improved city and farm property. The lowest rate in the State of Idaho is 8 per cent and the highest 10 per cent. The 10 per cent is on \$5,000 loan on mostly city property. 8 per cent is the average rate of interest on loans of that kind. I have had some experience in bond issues on public utilities, some in the State of Idaho. My company has placed of bond issues of public utilities hundreds of thousands of dollars. We have handled about \$20,000,000 security since I have been there, covering a good many issues. Bonds securing by mortgage or trust deed for the full value of the property are not marketable no matter what the rate of interest. It depends somewhat upon the character of the plant as to the marketability of the

(Testimony of R. L. Rutter.)

bonds. I have had enough experience in the marketing of securities and in the banking and trust business so I can tell what is a fair rate of return and interest on a public utility like a hydro-electrical plant in Idaho. I would say at least 10 per cent.

Cross-examination.

(By Mr. ELDER.)

Your loans run all the way from \$500 up. I don't know what the largest loan is. On a bond issue we handle \$50,000; we have handled up to \$50,000 on first mortgages. The most of our mortgages in Idaho have been 10 per cent; it depends largely on legislation what the prospect in the near future is as to the per cent. I don't think the rate of money is less at the present time than that was a year ago. In fact, I know it is higher. I am not interested in the Washington Water Power [434—150] Company. My company is. The company has some stock in the Washington Water Power Company. A large number of bond issues are at a low rate, although we handled a bond issue of public utilities up here at 8 per cent discount that netted the seller a little bit less than 10 per cent, over 9. It is true that our company was agent or in the market itself for bonds of this county at 5 per cent. First-class farm loans generally bring from 8 to 10 per cent. Farm loans bring from 8 to 10 per cent. If the loan is made direct to the company it is pretty near up to 10 per cent; if the loan is made through an agent here the agent gets a commission above 10 per cent.

(Testimony of R. L. Rutter.)

In the city of Spokane, where you come into competition with large life insurance companies in the east, for instance, the Penn Mutual, they will loan on property situated at a particular point at between 5½ and 6 per cent. In addition to that there is a commission paid to the agent in Spokane, but that is a very small part of the territory served. We have right now over \$175,000 of 10 per cent loans in Spokane. Those loans run up to \$5,000, and I think we have one at \$10,000.

**[Testimony of A. Cook, for Plaintiff.]**

A. COOK was called as witness on part of plaintiff, and on direct examination by Mr. GRAY, testified as follows:

My name is A. Cook and I reside at Ross Station. Am in the abstract business here in Coeur d'Alene and have been in that business for a great number of years. I have examined the records of Kootenai County for the purpose of ascertaining what mortgages were given upon farm lands, tracts outside of the cities, in the year 1910. I have also made a list of those loans showing the name of the mortgagor and mortgagee, the descriptions of the land mortgaged and acreage, and the amount of the mortgage in dollars. I have examined the assessment-roll of this county for the year 1911 for the [435—151] purpose of ascertaining assessed value of the several tracts and pieces of land so mortgaged. I have also examined the records of deeds of this county for the purpose of ascertaining what transfers or conveyances of land were made in 1911 in Kootenai

(Testimony of A. Cook.)

county where there was other than a nominal consideration named in the deed, and have prepared some sheets showing the names of the grantor and grantee, the date of the conveyance, the description thereof, the amount of the consideration and book and page where recorded. I have examined assessment-roll for the year 1911 to ascertain the assessed valuation of each of these pieces of land. I have also examined the records of Kootenai county for the purpose of taking such city property in the city of Coeur d'Alene which was conveyed in 1911, where there was a consideration other than the nominal consideration given in conveyance, and have made some sheets showing name of grantor, grantee and date of deed, and description of the land. I have also examined assessment-rolls for the year 1911 for the purpose of ascertaining the assessed valuation thereof. These are the sheets which are attached to my affidavits filed in this case, and I have also these three additional sheets. Those sheets attached to the affidavits are copies of the sheets we made. These four sheets partly represent the conveyance of land in Coeur d'Alene with the recited consideration and the assessed valuations.

(Document thereupon marked Plaintiff's Exhibit No. 15.)

(Pages attached to affidavits thereupon marked Plaintiff's Exhibit No. 16.)

WITNESS.—In making those sheets I included all of the deeds and mortgages coming within the classifications which are mentioned thereupon.

(Testimony of A. Cook.)

(Exhibits 15 and 16 offered in evidence.) [436—152]

These sheets are all made up from the original records of the county in the recorder's office. Under the assessment valuation the amount is given as equalized, after the State Board had equalized it. That is, the amount on which the taxes were levied. The amount given there is the amount on which the taxes were levied. It was assessed at 15 per cent higher, whereupon the said exhibits were received in evidence.

Thereupon it was admitted by the evidence that the plaintiff appeared before the Board of Equalization of Kootenai County, Idaho, and protested against the assessment in controversy and introduced evidence shown by document marked exhibit 17, which was introduced and received in evidence correctly showed the proceeding had before the Board of County Commissioners of Kootenai County, Idaho, sitting as a Board of Equalization.

**[Testimony of Fred E. Wonnacott, for Plaintiff  
(Recalled—Redirect Examination).]**

FRED E. WONNACOTT was called to the stand, and by redirect examination by Mr. GRAY, testified:

I have computed assessed valuation of those easements and fee lands on which taxes were paid for the year 1911 by plaintiff. There were 261 easements containing 6,917.31 acres, assessed at \$172,932.25, that being the equalized assessment. There were 15 pieces of fee lands containing 375.19 acres assessed



(Testimony of Fred E. Wonnacott.)

at \$11,256, and those lands were cut by the State Board 15 per cent, and assessed finally at \$9,570. There were 175 acres of land lying along the Spokane River between Post Falls and Lake Coeur d'Alene which were also assessed, other than the property of the plant. The equalized assessment was \$18,619, on which the taxes were paid. In a verified answer in this case, signed by me in paragraph 27, there is the following statement: "Answering paragraph 31 of plaintiff's [437—153] bill of complaint, defendants and each of them admit that in Kootenai County there are large areas of valuable farm lands valued at from \$200 to \$300 per acre, and so valued and held by the owners thereof, having an actual cash value of from \$200 to \$300 per acre, and a market value of from \$200 to \$300 per acre, on the second Monday in January, 1910."

I cannot tell from the answer just exactly where each particular tract of these lands is, but I can tell you some of them. Some of those lands along Hayden Lake are assessed from \$200 and as high as \$500 an acre. Those large areas worth from \$200 to \$300 an acre are situated between Coeur d'Alene and Hayden Lake, out around Dalton Gardens, but not there altogether. There are some farm lands out there and some lands along Hayden Lake. I cannot tell without going to the rolls where all of those farm lands are situated. I assessed farm lands outside of the city limits of Coeur d'Alene or lying adjoining the city of Coeur d'Alene as high as \$300 an acre. I assessed them right out north of town here ad-

(Testimony of Fred E. Wonnacott.)

joining the city limits. I think I assessed farm lands lying outside of the city limits at \$300 an acre in Section 12-50-4 West. I think a man by the name of Barber owned those lands.

(Thereupon witness was sent to examine rolls and later returned and continued:)

I will read over the list you wanted. The descriptions of the agricultural lands in this county assessed at \$150 per acre and more are Spokane Leather Company, Lots 20, assessor's plat 14, 1 acre, \$375. That is farm land situated in the northeast part of this township 50-4 West; that is a garden tract that includes just the acreage. Mrs. Gentry, Lot 2, plat 14, half an acre, \$175. That is not adjoining the [438-154] limits, but they are in the vicinity of the town here, perhaps. Robert Allen, Lot 10 and 11 in plat 26 in Section 12-50-4 West 5 acres, \$140 per acre. Fred Westberg, Lot 12, Plat 26, in the same locality.

(Witness temporarily excused.)

**[Testimony of A. J. Wiley, for Plaintiff (Recalled).]**

A. J. WILEY, recalled to stand on the part of plaintiff, and testified as follows:

Taking into consideration the reasonable cost of the plant at Post Falls as testified to by me, and the depreciation thereof as testified to by me, and taking into consideration the following facts, to wit, that the average net earnings of the whole system in the State of Idaho for the years 1908, 1909 and 1910 was \$164,900 and some odd dollars, and that the depre-

(Testimony of A. J. Wiley.)

ciated value of the transmission line and substations in Shoshone County is \$265,585; and that the value of the transmission line in Kootenai County is \$183,000; that the value of the substation at Cataldo is \$20,880; and the value of the overflow lands is \$200,000, and that 80 per cent of the business of this company in Idaho is in Shoshone County for power at the mines, in my opinion, was the fair market value of the Post Falls plant in January, 1911, and by fair market value I mean that which a creditor would be willing to take the same at from a solvent debtor was \$972,196.40.

On cross-examination by Mr. ELDER witness said:

I get at that value by capitalizing the net earnings and deducting from the net earnings the value of all the property in Idaho outside of the Post Falls station. I figured the net earnings \$164,166.14. I figured interest at the rate of 10 per cent. I took into consideration the value of the reservoir in this way, that that adds to the net earnings by increasing the output of the plant. I did not take into consideration the value which it added to this site and to this property by reason of the fact of increased revenue and increased [439—155] net earnings of the company by reason of its other power plants below this reservoir. I did not figure out myself the net earnings; the average net earnings are \$164,166.14; it is capitalized at 10 per cent—\$1,641,661.40. The depreciated value of the Shoshone County property on January 1, 1911, is \$265,585. The assessed valuation of the pole-lines in Kootenai County is

(Testimony of A. J. Wiley.)

\$183,000; the assessed valuation of the flowage lands in \$200,000; the depreciated value of the Cataldo switching station, \$20,880. The sum of these last four items is \$669,465. Deducting this sum of \$669,465 from the capitalized value of \$1,641,661.40 leaves a difference of \$972,196.40, which I consider the actual value of the Post Falls plant based on the net earnings. I am not offering any opinion as to the market value of that property. I hardly want to say that I have considered the examination which I made of the property personally in the estimate or figure which I have given. Of course the actual condition of the property had a certain element in my calculation. I was going to say that I had also made an estimate of value based on the cost of reproduction, but I consider the former, the one I gave you, the proper value myself, the proper method. I would not say that I mean that the figures I have given and the value which I placed on this property is placed on it from the figures which the company gave me. My estimate is based partly on the physical valuation of the plant. I, of course, would not consider the plant had this value unless I knew that no matter what the market value figured at, unless I knew it had a physical value back of it. It would have to have the two combined. I can explain it by saying that if it did not have the physical value back of it, it would not be allowed for any length of time to charge such rate as would return this present income, so that I think the two have to go together; you have [440—156] to have the physical value

(Testimony of A. J. Wiley.)

and the income value also. I am stating that it has no greater value. I think it has not any more value because it will not pay interest on any larger value. I also made an estimate of its value based on its cost of reproduction. These figures which I have given you are based entirely upon the income value of the plant. I have not considered the site at Post Falls as benefited and increased in value by reason of benefits accruing to the other plants of the company lower on the river from the site at Post Falls and their reservoir created thereby. I think the other plants are benefitted by it, but I can't see that this plant is benefitted by the fact that it helps other plants. This plant standing alone would not be benefitted. The value of this plant to the Washington Water Power Company might be increased, but it would not be increased to any other owner. I can't see how it would be increased in value. The company have other plants to which it is contributing, but if I owned the plant it would not increase the value any because I was furnishing water to the Washington Water Power Company; I couldn't hold that water there; I would have to use it. I can't say that the fact that that plant and site holds the water, which allows other people to make considerable more power lower down the river would add in value to the plant, for the reason that if I operate that as a power plant I have to let the water go to do it. If I do not operate it as a power plant but hold it as storage, then I would lose its value as a power plant. In answer to your question



(Testimony of A. J. Wiley.)

whether by reason of the reservoir which is created by this site and dam at Post Falls, the Washington Water Power Company is enabled to increase its output at the Spokane plant by 12,100 horse-power, and is enabled to increase its output at Little Falls by 5,400 horse-power, I would say that that fact would certainly add to the value of the site of the Washington Water Power Company. [441—157] The capacity of the turbines and generators I testified to concerning is 2,250 K. W., and the water-wheels have sufficient capacity to drive the generators. They have a head there of about 52 ft. As I understand it, that is the effective head.

Redirect Examination.

(By Mr. POST.)

By the depreciated cost of reproduction I mean the cost of reproduction to put that plant into the original value and then depreciating that for its life for the length of time it is in service, taking away a certain percentage of its original cost to get this present value. My estimate of the value of that plant based upon cost of reproduction is \$1,019,342.75, which I consider the present physical value of the plant. To this I add the cost of the land, \$109,272.44, making a total of \$926,675.23. To this I add an arbitrary amount of 10 per cent of what is commonly known as the going value, which amounts to \$92,667.52, making a total of \$1,019,342.75.

Recross-examination.

(By Mr. ELDER.)

I stated I added a rate of 10 per cent for a going

(Testimony of A. J. Wiley.)

concern. I would imagine that all kinds of businesses are not allowed the same rate as a going concern. It is generally considered that there is some sort of intangible value that is allowed usually for the fact that you are connected up, ready to do business. It isn't simply a plant completed and standing idle, but is all connected up ready to do business, and there is a general feeling that there ought to be some allowance made for that, and 10 per cent, is the usual allowance. It might be 15, it might be 5 per cent, but I just simply make it 10 per cent. I am unable to answer your question whether or not 10 per cent of some concern would not be anyways near sufficient. I am quite familiar with Foster, but I have never noticed that in his writing. I did not [442—158] figure any depreciation in the value of the real estate. I figured its original cost. I did not consider the horse-power delivered to Mr. Strathern. With regard to my estimates based upon capitalization of net income, I took about \$164,000 as the average for three years. Supposing that the records should show the income for 1908 was \$200,000, in 1909, \$164,000, in 1910, \$128,000, making an average of \$164,000 for the 3 years, I wouldn't consider the plant worth as much. Supposing it was the other way, that in 1908 it was \$128,000, in 1909, \$164,000, in 1910, \$200,000. If I had reason for believing that the ratio was going to continue to increase, I would consider it worth more. Supposing I had reason to believe it would stay up to the maximum of those three years; it would then be worth more. In other

(Testimony of A. J. Wiley.)

words, it is not only what the net income has been for the 3 years, but what it is likely to be for the succeeding years. Where we are capitalizing the net income that way, my basis of calculation really is the probably average income for a long period of years in the future. All of the elements, whether the income is rising or falling or fluctuating, are to be considered.

Redirect Examination.

(By Mr. POST.)

I take into consideration the outlook for business, that is, part of it; the character of the business being done, the character of the customers, whether the business is liable to play out or continue; and also take into consideration the probability of competition in the particular neighborhood where the business is being done. In this case I took into consideration the character of the business as being largely mining, and the probability of competition. In that connection I would think the business is very likely to decrease. This plant in connection with other plants of the company, I think, would probably keep up its earnings, but from my experience in [443—159] mining districts I have very grave doubts whether the present earnings of this plant would keep up. I know nothing about the Coeur d'Alene district. I know other mining districts which have been supplied by electrical power plants, in which the earnings have ceased entirely within a period of 10 years, and the lines have been abandoned. My first estimate was simply a mathematical calculation from the

(Testimony of A. J. Wiley.)

figures given. I assume that the Coeur d'Alene were going to be the same as they are now, the same as they have been for the last 3 years. I do not think I should take the income of the last year, because that might be simply accidental; there might be some reason for an increase or decrease. I think you should take a period of at least 3 years so as to get an average. It would not be fair to take the first 3 years of a new business, but this is an established business, and really there is not a very great deal of difference in those years. I think the average increase is carried forward.

**[Testimony of C. F. Uhden, for Defendants.]**

C. F. UHDEN, called as a witness on the part of defendants, on

Direct Examination.

(By Mr. ELDER.)

I cannot state the increase in power by horse-power which the company is enabled to generate at their Spokane plant by reason of the bear-trap dam and reservoir which is created at Lake Coeur d'Alene. I cannot get it from the records here, but can from Spokane. That is, I will say that I can get it approximately—approximately the area of the lake is somewhere in the neighborhood of 40 and 45 square miles; whether that would include the overflow land or not, I could not say. The bear-trap dam will raise 10 feet above the crest of the dam. I cannot tell you how many horse-power can be generated at Spokane without the lake storage at the lower storage of the water, for the simple reason that my work with the

(Testimony of C. F. Uhden.)

company has been only construction of new plants. This plant was built [444—160] before I started to work for the company. I can give you the increase in horse-power we are enabled to generate at the Little Falls plant by reason of this lake storage. That would depend upon the amount of storage in the lake. I can't give you that offhand, but will get it for you.

(Witness temporarily excused.)

**[Testimony of Fred E. Wonnacott, for Defendants.]**

FRED E. WONNACOTT was called as a witness on part of defendants, and being duly sworn, on direct examination by Mr. ELDER, testified as follows:

My name is Fred E. Wonnacott. I am assessor of Kootenai County, Idaho, and have held that position since January 9, 1911. I came to Kootenai County in 1882 and have lived here more or less ever since. I have resided at Rathdrum and in Coeur d'Alene City. I have been familiar with the power site at Post Falls for probably 30 years. The property of the Washington Water Power Company that I assessed in 1911, giving the value of each item as assessed, and giving my reasons for placing the values which I placed upon the property, see page 11, book 1 of deeds, 274,394 acres of power site, including the lands under the river, assessed at \$1,080,000. I assessed it because I thought it was worth the price I assessed it at. I assessed it at the same ratio I did other property in Kootenai County. I obtained all the infor-



(Testimony of Fred E. Wannacott.)

mation I could in regard to the property, and I assessed it for what I thought it was worth. I assessed the property which they purchased from the Cable Milling Company at \$40,000. I assessed the property they bought from Mr. Strathern at \$50,000. The two items, one from Strathern at \$50,000 and one from Mr. and Mrs. Martin for \$25,000 makes up the item of \$75,000. I arrived at those figures because there were 250 horse-power sold to the plant for \$40,000, and I based the assessment of the Strathern property and the Martin property on the same basis. There were 250 horse-power delivered to Mr. Strathern free on the line for his holdings and there was 125 horse-power delivered to Mr. [445—161] Martin for his holdings, and I assessed it on the same basis as I did the Cable Milling Company property for which they paid \$40,000. In assessing the power site I considered the storage value of that site. I assessed it on an acreage basis, 270 acres at \$4,000 an acre. I got my information from various sources. I first asked the plaintiff for a statement of their holdings at Post Falls for assessment purposes. They sent me a statement of their property, or statement of part of their property, almost a verbatim copy of 1910 list, but it wasn't sworn to or verified except the items were almost the same as they were in 1910. Then I went down to the recorder's office, and as the descriptions given on the statement referred to the pages and books of the records of Kootenai County, I verified the list, verified the description of the property given, in order to find out just

(Testimony of Fred E. Wonnacott.)

exactly the property that they gave in. I assessed it just as they turned in the list, according to their descriptions. I have the list right here. There were one or two items not on the list. I added those. There were 23 miles of pole line, or 25 miles of pole line, the way I have it assessed, Pend O'Reille pole line, wasn't on their list and I added that, also added 839.69 acres of easements for their pole line, which they didn't give in, and one or two minor items here, and then I obtained all the information I could get in regard to those things and assessed them. I did not close the assessment of the company's plant until the 30th of June, 1911, the very last day there was for me to close up the books. I visited the plant several times for the purpose of inspecting it. I did not get into the plant. I was really refused admittance to the plant. The day that I took some deputy assessors down with me to make some calculations, we called at the office, or plant, and the man in charge informed us that it was against the rules of the company to allow anybody to go in, and we asked him to call up the office or person in charge and ask him if we couldn't go [446—162] through the plant, and he went to the telephone, called up somebody and then returned and told us that the instructions were that we could not go through. I had Mr. Tinkle, president of the First National Bank of Coeur d'Alene, with me. He is not an engineer, but he has had some experience in power plants and has owned some interest in power lands. I took him there for the purpose of getting his opinion. I took Mr.

(Testimony of Fred E. Wannacott.)

Thompson and Mr. Wolfe, who was a clerk in the bank at that time. Mr. Thompson was a deputy at that time and was familiar with the books of that office and with the Washington Water Power Company in 1910. I made one trip just alone; went over the railroad track and spur which was itemized on their list here, railroad spur and bridge. There were rails and the track there. I don't know just the dates I was there, but was there between the second Monday in January and May or June, 1911. I was there alone and went over this entire track at this time with the view of getting information regarding it. I estimated the length of the bridge. There is a bridge about 115 or 125 feet long and there is another bridge across the Corbin ditch. There is a wagon bridge also owned by the company, and all three bridges and the railroad spur were assessed under the head of railroad spur and bridge. I noticed quite a good deal of rock work down along the right of way, and the railway spur was ballasted. The bridges looked to be like permanent structures; they had concrete abutments underneath in the bed of the river, blasted out of the rock in each end of the bridge, and they looked like permanent structures, although it didn't seem to me that any trains or any cars had run over the track for some time. It didn't look as if there was any traffic or travel over the road. I sent others down there. I sent Mr. Butcher, who was my deputy in the office, to make examination of the buildings and structures. Butcher was a builder and contractor. He built the Swedish College [447—163]

(Testimony of Fred E. Wonnacott.)

down here under contract, and he has been in my office for the last year. I sent John Snyder, who lives on the Coeur d'Alene River, down. He has had some experience as an electrical engineer and I took him down to examine the machinery. I went through a great deal of investigation, hunted up all the records I could find, hunted the court records, and I found a great deal of testimony and the testimony of Mr. MacCalla in the Waters' case, which was tried in the District Court here. I read the testimony to Mr. MacCalla in regard to the plant at Post Falls, which bore on the capacity of the plant and the value of the lake as a reservoir, the increase in the capacity of it. I found Mr. MacCalla's testimony in the office when I went in and read a great deal. I read a good deal of testimony in those cases and a great deal of the information I got was obtained from the records in that way. Thereupon put pages 235 to 249 of the record in the case of the Washington Water Power Company vs. Waters, District Court Kootenai County, Idaho, and the record of appeal was introduced and received in evidence.

WITNESS.—I talked with a great many people about the plant at Post Falls, talked with everybody I could meet that knew anything about the plant, talked with residents of Post Falls, talked with Mr. Strathern. I also talked with Mr. Martin, Mr. Martin who had a deal with the Washington Water Power Company, was one of the owners of part of the power plant there, and an old resident there; talked with Mr. Endere, talked with Mr. Tom Rus-



(Testimony of Fred E. Wannacott.)

sell, who was one of my deputies down there at Post Falls.

I consider statements and books published by the company. I consider the financial statement which has been identified by the evidence here; I consider the circulars they sent out in regard to the plant at Post Falls, and their other plants. There was a great many things that I went into [448—164] before I made—as I say, I didn't close up this assessment until the very last day, until I was compelled to close it, on the 30th day of June, 1911, was when I finished up this,—I tried to get some information from the company.' No—I telephoned in to the company, I think, more than once—I was told that Mr. Bleecker was in California, and he couldn't be here. I didn't get any information from the company at all as regards—that is, as I remember of—in regard to the cost of the improvements down there at all. I gave them every—I waited until the very last day, thinking that someone might come and talk the matter over and try and arrive at a close valuation, especially on the improvements down there. I didn't think we could possibly agree on the power site, but I did think we ought to be able to get pretty close together on the improvements, but there wasn't anybody came up and I had to close up this business on the 30th day of June, and I closed it up. Afterwards Mr. Bleecker came back from California, came into the office, and wanted to know what the figures were, and I gave them to him, just as I have them here, and he laughed at me and made a good deal of fun



(Testimony of Fred E. Wonnacott.)

about it, and seemed in a good humour about it, but, of course, they went before the Board and filed their objections, and I appeared and answered as well as I could.

Mr. Bleecker, to my knowledge, did not come to my office with Mr. Gray before the assessment was made. He did not ever see me in my office in the presence of Mr. Gray before that assessment was made. Mr. Gray introduced me to Mr. Bleecker after the assessment was made. The assessment was made on the 30th day of June. Mr. Gray did not, in my office or at any place in the presence of Mr. Bleecker, in June, 1911, after the 7th of June and before the assessment was made, tell me that I could go to Spokane and examine the books of the company—not until after this assessment was made. I am sure [449—165] it was when Mr. Bleecker was in the office, and Mr. Gray, after the assessment was made,—some time in July, introduced me to Mr. Bleecker and Mr. Bleecker and I talked this matter over before the Board of Equalization here this year, and he admitted that the figures were made before he ever met me. I think it is a mistake, that is, all in regard to that testimony of Mr. Gray. I think he made a mistake. I do not say he misrepresented anything in his testimony, but I think he is mistaken. I am sure he is, because this assessment was made on June 30th, 1911. I had to close my books at that time. Mr. Bleecker was in California prior to that time and I never got to see him at all and never knew him until that date. I think I had a talk with the employees of

(Testimony of Fred E. Wannacott.)

the company in regard to this plant. There was a man come up here at one time; he didn't have full authority to act in the matter. I didn't have any conversation with anyone else employed by the company before the first of July. I think he came up during the last days. He didn't have any authority to do anything. He told me Mr. Bleecker was away, and there was nothing he could do.

Thereupon the Court admitted in evidence pages 2 and 3 of prospectus, marked exhibit No. 1, for identification.

WITNESS (Continued).—I assessed the other property in Kootenai County at its full value as near as I can. [450—166]

On cross-examination by Mr. POST, witness continued: I had 10 or 12 deputies assisting during the period between the second Monday in January and the first of July. I did not, in order to keep posted in regard to the values, in Kootenai County, keep track of sales as they appeared of record in the Auditor's office. We probably paid some attention to the prices property sold for during the year, but did not run down the records to find it, we did not pay much attention to the mortgages that were given; I didn't look that matter up. I don't think it is customary to give mortgages to mortgage companies for more than the value of the real estate in this county. I never looked up to see whether every real estate mortgage that was given during the year 1910 was in excess of the assessed valuation that you put upon that property. I don't know anything about the

(Testimony of Fred E. Wonnacott.)

rule in Kootenai County as to mortgaged property, that the mortgage is not to exceed 40 or 50 per cent of its value. I know nothing about that. I did not get the figures, \$562,500, at which I assessed the bear-trap dam and small dam, from anybody. I made those figures up myself. I took into the consideration that the bear-trap dam was a part of the reservoir, and did not assess the bear-trap dam at \$562,500, on the theory that they cost that much to construct, but principally on account of the company ownership of property there at Post Falls, and the reservoir site. I tried to get at the figure those dams cost to build and what they would cost to rebuild. I made the figures it would cost to rebuild myself. I did not exactly guess at it. I never could get the dimensions of that dam from the company. After a good deal of persuasion I got the dimensions of the lower dam, but I never did get the [451—167] dimensions of the upper works. I think I got the dimensions of the lower dam from Mr. Uhden and Mr. Steele. I got that this year; I did not get it before January 1st, 1911, or before June 30th, 1911. When I made the figure \$562,500, I figured the upper dam there, the bear-trap, was about 115 feet on one angle, and about 225 feet on the other, and about 340 feet in length. I did not get any engineer or anyone to help me figure those dams. I did it myself.

Before I became assessor I was in the mercantile and real estate business; I never was an engineer, or claimed to be; I never had any experience in building

(Testimony of Fred E. Wannacott.)

dams or similar structures. I failed to state in my original statement that I tried to get the County Commissioners of the County to employ an engineer to go down there and make a thorough examination of the Post Falls Plant early in the season of 1911. They seemed inclined to do it, but they put it off so long it just left it up to me to go ahead and do the work; that was all there was to it. I went down there and used my best judgment on it. I figured this way, that that dam there, while it might not have cost exactly \$562,500 to build it, it is a big structure, larger than the other one below; it is a great big concrete proposition there, and they had people working there for over a year on that proposition there, and it looked to me like a bigger proposition than the lower one. That the company is a big company did not enter into my figuring; I figured the lower dam would cost \$200,000, but I assessed it at \$150,000. In figuring out that cost I could get around on the outside and look at it and examine it closer than the other; that is all, estimated its length, width and [452—168] depth. I made an estimate in my mind what that would cost. I am not supposed, when I assess a brick building, to go in and count the bricks in the building; then I made the bear-trap dam there at \$562,500, because it looked to me to be a great deal bigger proposition, and the further fact that I considered, that they controlled the water. I just remembered that last item. I didn't consider the buildings down the river so much as I did the storage capacity up the river. I just put in the cost of the



(Testimony of Fred E. Wonnacott.)

dam and the storage value as a whole. I did not make any segregation of it. I assessed machinery at \$350,000; I saw part of it. I took Mr. Tinkle with me down there. He saw the machinery and so did I. We looked it over. I think that was in May or June, 1911. We did not get in the building, that is, Mr. Tinkle didn't, but I got in afterwards. Mr. Tinkle looked in the windows and followed around the building on the outside and we could see in from the outside part of the machinery. We got a pretty good idea of the machinery that was inside. I think it was in 1911, when I got in that part of the power-house where the machinery was. I think it was in April, May or June. There was no one with me. I do not know the man's name in the power-house when I went in. I walked down the railroad track; I started from the Northern Pacific track and followed the track down to the lower power-house, and the door was opened and I walked up to the door. I didn't attempt to walk through the door, because I knew the rule of the company that no one was allowed; I didn't think about it being dangerous, because I was not afraid of it. Besides Mr. Tinkle there was never anyone else went down with me through the plant, nobody from the assessor's office.

[453—169]

I put the valuation of \$350,000 on the machinery. I based that on conversations and inquiries that I had made in regard to that class of material and that class of machinery, and from some things Mr. Tinkle said, and from things George Harding told me in



(Testimony of Fred E. Wannacott.)

regard to machinery of that character, and I think I had some cost sheets some place. My mind was not influenced in any way in fixing the valuation upon this machinery from this book that has been introduced in evidence, Defendant's Exhibit 1, pages 1 and 2, and this financial statement, nor was my mind influenced in fixing the value on either one of these dams by Defendant's Exhibits 1 or 2. The part of this assessment that I made I placed the valuation on because of these statements was particularly the power sites, that is, the assessment of \$1,080,000. The statement in there that affected my mind in assessing that 270 acres of land at \$1,080,000 was the water-power plant at Post Falls, 24 miles east of Spokane, with a present development of 15,000 electric horse-power. In connection with that there was the financial statement there, and this statement, "All these water-power plants are on the Spokane River and their stability is assured by the natural reservoir of Lake Coeur d'Alene, which has an area of 45 square miles, and is situated on the Spokane river 34 miles above Spokane."

I was not trying to assess the property of the company because of the natural reservoir of Lake Coeur d'Alene; in addition to that they had a right to condemn lands up there, that land was put out of use. I was assessing them for the value of the storage capacity. That is, in figuring this at \$4,000 an acre for the 270 acres at Post Falls, [454—170] I was partly assessing for the value of Lake Coeur d'Alene as a reservoir and I assessed them for the site at

(Testimony of Fred E. Wonnacott.)

Post Falls. They had the right of condemnation of these lands. They condemn the lands on the river that are taken out of the taxable property of the county, and they destroy values there, and it seems to me that they should be willing to pay for it. I assessed their lands at Post Falls for the items I have just mentioned \$1,080,000. I assessed it at \$4,000 an acre for the destruction of the property up the river. I assessed them on the plant at Post Falls as a reservoir site, and of course, took into consideration the overflow.

(Thereupon Defendant's Exhibit 2 was received in evidence.)

Direct Examination.

(By Mr. ELDER.)

(Witness continued:) No valuation was placed upon that substation at Cataldo for the year 1911, it was not reported in that statement for 1911.

Cross-examination.

(By Mr. POST.)

(Witness continued:) In assessing the lands, dams, buildings and machinery in 1911 I was not influenced in any manner by the fact that County Commissioner Ferguson had some land on one of these rivers that flow into Lake Coeur d'Alene, and claimed that he was being oppressed and injured and damaged by the Washington Water Power Company, and that he had sued them for \$8,000 or \$10,000. Nor was I influenced by the fact that this company had a considerable amount of litigation with settlers on these rivers. It was nominated under the

(Testimony of Fred E. Wannacott.)

direct primary law. I didn't take into consideration at all whether if I assessed this alien corporation, the Washington Water Power Company, at a very high figure it would in any way [455—171] be unpopular in this county, or injurious to me. I did not consider that the part in that report dated December 31st, 1910, that influenced me in assessing the items I referred to was the dividends paid by the company one item. I took into consideration in connection with this statement here, that the Washington Water Power Company had a plant at Post Falls and a plant at Spokane that was creating this large amount of revenue. The principal amount of revenue, it seemed to me, came largely from these 2 plants, for the reason that the plant at Little Falls was not completed until about the 1st of September, 1910. The statement shows the gross receipts of the company and the operation expenses, and dividends paid. I do not know how to figure anything but the gross earnings and dividends paid on the gross earnings. In making the assessment I was aware that the company had a street railway system in Spokane and an interurban street railway line to Medical Lake. I looked up somewhat that it owned a large amount of real estate in Spokane. I am not positive about it having an electric light system very complete in the City of Spokane, that lighted the city and furnished light to the inhabitants. I was aware that it had a transmission line running west almost to the Columbia River, which furnished light and power for that great section known as the Big Bend

(Testimony of Fred E. Wonnacott.)

country. I did not know particularly about it having a transmission line down into the Palouse country.

In connection with the assessment on machinery I didn't take into consideration the amount of dividends paid as affecting its value, nor the value of the machinery. I did not take that into consideration in valuing the buildings, nor the concrete foundation and dam item I have here of \$150,000, [456—172] nor in valuing the bear-trap dam and small dam, I have assessed at \$562,500. I did take that into consideration in valuing the real estate, the 270 acres. In valuing the 270 acres at Post Falls I tried to take into consideration the whole system of the company in Idaho, the amount of business it was doing and its general earnings. I tried to get an estimate of what I thought was the Idaho proposition of it earned by the plant at Post Falls; in a general way, I tried to figure out what per cent of gross earnings I could charge up to Idaho, and credit to Idaho. I thought about a third of the system, one-third of their property was at least in Idaho, for their power plant, and that one-third of the value of the power plant was in Idaho, the earning plants. This statement showed that they earned 7 per cent dividends right along. If the statement shows anything about what they earned from the street railway system. (Witness shown paper.) It shows in here what they earned from the street railway system; it just shows the gross receipts and expenses, it does not segregate those items there, it

(Testimony of Fred E. Wannacott.)

does not show either the gross receipts or the net earnings from the electric system. I did not take from either the gross receipts or the net earnings of this street railway system in making my calculations, except in a general way. I figured that the power plants were the primary producers of this enormous revenue, and I just took it in connection with my assessments in a general way. I did not go into exact figures on those things. I did not subtract from the entire investment, or subtract from the gross receipts or net receipts any items on account of the street railway. I figured that the Post Falls plant and Spokane plant produced [457—173] the revenue, I should think. I took one-third of the entire revenues of the company as being produced by the Post Falls plant. I cannot state what my calculations were. I did not capitalize that amount at some rate of interest. I don't remember what the amount was I figured for net revenue. I figured what the entire value of the property in the State of Idaho was; it was over three million dollars. I figured the entire value of the property in Kootenai County at over three million dollars. I should say the value of the property was over  $3\frac{1}{2}$  million dollars, but I was afraid to assess it at  $3\frac{1}{2}$  million. I wanted to get within the value. I figured that the outstanding bonds at that time were in round numbers about \$5,000,000; the capital stock outstanding was somewhere between \$12,000,000 and \$13,000,000, according to the statement I had seen; that is, about \$18,000,000 entire, and I figured that



(Testimony of Fred E. Wonnacott.)

the Washington Water Power Company had invested at least that amount of money. I did not take any per cent of it to get at the value of the Idaho property, but I thought by those figures that this plant at Post Falls was worth, in my judgment, 3½ million dollars. I did not use any percentage of the value of the entire property in order to get at this property in Kootenai County and did not subtract from this \$18,000,000 the value of this street railway system. I did not know exactly the value of that.

I took into consideration in making the assessment of the property what the property would sell for, and my opinion on that was based purely on my own knowledge and information from these reports. I do not remember that there was anything in Mr. MacCalla's testimony, referred to here, that influenced [458—174] me with regard to the valuation of the machinery. I do not know whether any part of his testimony influenced me in figuring the value of these dams, but part of his testimony influenced me in figuring the value of the 270 acres. Some place here he tells about the development of 15,000 horse-power. I read the item that influenced me in regard to the horse-power developed at Post Falls. I haven't found the item that says they developed 15,000 horse-power at Post Falls. I don't find that statement in his testimony. That statement did not affect me in fixing the value of the lower dams as a physical improvement. It perhaps had a little to do with fixing the value of the bear-trap dam, but

(Testimony of Fred E. Wonnacott.)

not the others. I think it influenced me in fixing the value of the bear-trap dam, the amount of electric horse-power that I thought was produced at that point. I have been led to believe that that bear-trap dam cost a large amount of money. If I had known anything about the electric horse-power produced at the power-house I would have assessed that dam for what I thought it was worth, and that is what I thought it was worth. I do not mean to say I thought it cost that amount of money to construct. I don't believe it would cost more than half of that to construct that upper dam they call the bear-trap. The other half I put in because of the additional horse-power that would be produced by reason of the dam. I mean because of the flowage and storage in the Lake and in the St. Joe and Coeur d'Alene Rivers. I assessed the easements and rights of the company on those rivers at \$172,000, I think, and in my assessment I added double to the value of the dams, partly because of these storage rights, and partly because of [459—175] the value of the real estate. I assessed 270 acres of land at \$4,000 an acre. I thought it was worth it on account of the value of the site; it was the key to the whole proposition there; it was the point at which these dams could be built to store the water; it increased the value of the holdings of the Washington Water Power Company in developing the large amount of power in the State of Idaho and also in the State of Washington; it increased the value of the Post Falls property. I couldn't estimate how much. I figured on it increasing the

(Testimony of Fred E. Wonnacott.)

value of the rest of the property of the company, it is so great. I believe it is a great deal more than a million dollars.

If the Post Falls plant had not belonged to the Washington Water Power Company, but had belonged to the Post Falls Water Company, and that company had had no property down the river at all, I would have assessed it at \$4,000 an acre, because I think it would increase the value. It increased the value of its property at Post Falls; that is where the value goes into that property there.

I answer your question as to how I estimated that the Post Falls plant, owned by a separate company would have its value increased, by the fact that the mills and manufactories down the river would get some benefit out of this storage, by stating that they control the water there, and if they don't let the water through they could hold it there, and they could do them damage down there; they could make them pay them for it. It is my idea that the company or person that owned the Post Falls plant could do some damage to the people down the river by shutting the dam and levy tribute on them, if they control the water, and I believe they control the water. I [460—176] considered it would be in their power to levy tribute on the mills and manufactories down the river. I think they would have the right and the power to do it, it would be valuable. If the company studied their own interest they would not shut the water off at Post Falls; they would have to let the water go through in order to

(Testimony of Fred E. Wannacott.)

operate the plant, and give power and light to its customers. In figuring the value of the plant at \$4,000 an acre, I didn't figure as to the annual tribute that this plant might levy on the mills and manufactories down the river. I figured what would be the salable value of this property to a person that wanted to buy from the Washington Water Power Company if it wanted to sell what a person would be willing to pay for it, and figured that at \$4,000 an acre. I figured that price because of the two factors,—one, its earning power, operated as a hydro-electric plant; another, its earning power because it could levy tribute on mills and manufactories down the river, and because of the other factors; that because of the site and the right to overflow the lands it increased the actual value of the plant and lands at Post Falls, regardless of any other. I did not take this tribute that they could levy very much into consideration. I figured it would be worth \$4,000 an acre as a separate entity, without regard to the benefit it would be to the people down the river. It is at least worth that, in my opinion. I based that opinion on the amount of power they could generate at Post Falls, 15,000 horse-power. I never bought or sold any water-power sites. I never knew of any except this one of the plaintiff being bought. I am not sure what they paid for it, but I [461—177] think it was between \$80,000 and \$100,000.

I go down to Spokane about once every six months. I was in Spokane perhaps once or twice in the early part of the year 1911. I don't believe I went to the company's office. I think I telephoned

(Testimony of Fred E. Wonnacott.)

to the office the fore part of the year 1911. I don't know the name of the party I talked with. I called for the manager, or somebody in authority down there. I can't say just what month that was I got this Defendant's Exhibit 1; in the early part of 1911. I got this financial statement, Exhibit 2, about the same time. I have been reading up on it a good deal; in this instrument marked Exhibit 1, it is stated who the officers of the company are. I don't think I asked for Mr. Harding, the president, over the telephone. I don't think I asked for Henry M. Richards over the telephone. That instrument states that Mr. Harding is president, Mr. Richards chairman of the executive committee; Mr. Bleecker second vice-president. I am not sure, but I believe I asked for Mr. Bleecker. I think they told me he was in California. I asked them to send somebody over here. I don't know who it was I talked with. I did not talk with the girl at the telephone office; I think I talked with somebody—I asked for somebody in authority. I don't think it was a female voice at the other end of the line; I do not know whether I asked for Mr. MacCalla, the general manager, or not. I didn't ask the girl to give me somebody in authority. I do not know who it was with whom I talked. I do not remember whether I had any conversation over the telephone more than once. I requested a statement showing the cost of these dams and I do not know whether it was over the phone or whether it was my mail, but I requested [462—178] that statement and they sent me that



(Testimony of Fred E. Wonnacott.)

statement, but it was not sworn to. I think the statement is here; it is in evidence. After getting the statement I think I had some little conversation with a gentleman that they sent up from the office with relation to this statement. I am not sure whether his name was Turstad—I think it was. As I understood it, he was a tax clerk, but he had no authority whatever, and he didn't know anything about the business either. I did not ask anybody connected with the Washington Water Power Company to furnish me a statement of the cost of this machinery, for the reason that they didn't have anybody that knew anything about that. I didn't ask any officer of the company for the privilege of going through their books and papers at Spokane to find out the cost of any of these things, or the earnings of the Post Falls plant. The officials of the company were in Spokane and I went down to the plant and asked permission of a young man there to go through the buildings, but I didn't telephone the company at Spokane and ask anybody there, and didn't call up an officer of the Washington Water Power Company, or tell them that I wanted to go through the plant, or ask for permission to do it. All that I did, on one day I went down to Post Falls and one of the employees told me that he was instructed not to allow anybody to go through the plant, and he wouldn't do it, and I asked him to call up the company's office to inquire about it. I didn't call up the company's office to inquire about it, it got too late; it was quite late in the season. I

(Testimony of Fred E. Wonnacott.)

went down to the Post Falls plant the last week in June. I believe this young man I talked to at the plant was named Enders, but I am not very well acquainted with him. I didn't get his name. I told him who I was. [463—179]

On redirect examination by Mr. ELDER, witness continued:

In making this 1911 assessment I talked with Mr. Smith, the assessor of the prior year, in regard to this property. Mr. Smith told me that in 1910 they were assessing the property in Kootenai county on the basis of 30 to 33 $\frac{1}{3}$  per cent of its value, and that Mr. Bleecker and he had agreed on the value of \$995,000 for the Post Falls property and the pole lines of the company. He told me that that was 30 or 33 per cent of the value.

Whereupon, plaintiff moved to strike out all of the testimony of the witness on redirect examination, which motion was denied, and to which ruling plaintiff excepted.

On recross-examination by Mr. POST, witness continued:

This conversation with Smith was early in the spring of 1911. I knew at that time that the company claimed that that assessment, whatever it was, was too high, and refused to pay taxes on that assessment.

**[Testimony of C. L. Cory, for Defendants (Recalled—Cross-examination).]**

C. L. CORY was called to the stand and on cross-examination continued:

The detail of this statement is complete and exactly corresponds with my testimony of yesterday, with this single exception: In attempting to determine the value of the Post Falls plant upon an earning basis in my testimony of yesterday I assumed that the cost of the property in Idaho, outside of the Post Falls plant, was for the flowage lands \$175,581. That, from [464—180] the testimony of Mr. Wonnacott, was modified to \$175,581. There is also the two figures given upon the assumption that the transmission lines in Shoshone county are taken at their depreciated value and also at their estimated cost, both figures being given. The one figure was not given yesterday. In every other respect it is exactly as given.

**[Testimony of J. W. Smith, for Defendants.]**

J. W. SMITH was called to the stand as a witness on the part of the defendants, and being sworn, on direct examination by Mr. ELDER, testified as follows:

My name is J. W. Smith; reside at Rathdrum, Idaho. I was assessor and tax collector of this county in the year 1910; was assessor and tax collector two years; prior to that time I was deputy two years; and have had four year's service as tax collector. I am acquainted with Mr. Bleecker, Second Vice-President of the plaintiff company, he

(Testimony of J. W. Smith.)

gave me the assessment of the property of the company, a list of the property for assessment, in 1910. As near as we could get at it the property was assessed in this county that year at about thirty per cent. He gave me a statement of the value for assessment purposes, but not in writing. Mr. Thompson and Mr. Wolf heard the conversation. Mr. Bleecker told me that they were willing to have the property assessed for any sum not to touch a million dollars but the company wouldn't stand for an assessment of a million dollars.

We had quite a conversation. I said to Mr. Bleecker that the property should be assessed for \$1,200,000. Mr. Bleecker said no, that was too much, the company wouldn't stand for that. They would be satisfied to stand for anything below a million dollars. I asked Mr. Bleecker if they would pass the Board of Equalization if I [465—181] assessed the property at \$995,000, and he said they would and would pay the taxes without a fight, and that was the way the assessment was made, on that condition.

(Witness temporarily excused.)

**[Testimony of Walter H. Graves, for Defendants.]**

WALTER H. GRAVES was called as a witness for the defendants and on direct examination by Mr. ELDER testified:

My name is Walter H. Graves; I reside at Portland, Oregon; I am a civil engineer and hydraulic engineer; have been engaged in the profession forty-odd years.

(Testimony of Walter H. Graves.)

I was born in Illinois, lived in a section of the country where there was a great deal of draining work done, and in quite early life I began to run drainage lines. I did that while I was attending school; earned enough money at that business, drainage engineering, to send me through college. I graduated from the Illinois University, and got a diploma or a degree of Bachelor of Science. I subsequently took a post-graduate course, and got a degree of Bachelor of Arts. Subsequent to that, by some special work that I did and a thesis that I prepared, I got a degree of Master of Arts. I got a number of other degrees. They are written in Latin. I don't know that I could translate them now, to find out just what they do signify, because I have forgotten. I attended college in Canada for a year or two, at Jaques Cartier College, and at Saint Hyacinth College. After leaving college I was appointed in the government engineering service and went to work for the government.

At that time I worked for about eight years, [466—182] serving in various departments and in various ways throughout the country, and some other countries. I left the Government service and went out west, came out west, and went into railroad work, subsequently into some mining work; then I took up irrigation—followed that a while. Then I was employed by the Travelers Insurance Company of Hartford, Connecticut, and their associate investors, as consulting engineer and construction engineer. I worked for those people for



(Testimony of Walter H. Graves.)

about 10 years, between 9 and 10. During that time I worked all over the United States, as an advisory engineer and constructive engineer. They were handling a great many securities, on all sorts of plants, and my business was to report upon those plants and the value of the securities.

I took charge of the construction of the plants ranging all the way from municipal water supply plants and electric light plants, and railroads, and coal. I put in the Pasco pumping plant about two or three years ago, designed it, constructed it.\* It cost about \$400,000. That was for some Spokane capitalists. I was employed by the same people to go and report on the Hanford Power project over on Priest Rapids. I made a survey for the Priest River power project for the same people, drew up the plans and details for their power plants, 162,000 horse power; and I had a number of experiences of that kind.

I read the principal engineering magazines and principal works on engineering.

I have visited the plant of the Washington Water [467—183] Power Company at Post Falls several times. In my judgment I would think a reasonable depreciation would be one per cent.

(Witness temporarily excused.)

**[Testimony of Earl Brown, for Defendants.]**

EARL BROWN was called as a witness for the defendants, and being duly sworn, testified, on

Direct Examination.

(By Mr. WERNETTE.)

My name is Earl Brown; residence, Coeur d'Alene, Idaho; occupation, assistant vice-president of the Coeur d'Alene Bank & Trust Company; have been interested in the banking business seven years, in Washington and Idaho. I should think the going rate of interest, depending upon the security, on large sums of money, as from a quarter of a million to over a million dollars would be about five to seven per cent, depending upon the proposition; the better the security, the lower the rate; the surer, the lower the rate. If there is a chance in the investment, that would be its effect. It is seldom they would be required to sell them at a higher rate, because people want a higher rate for taking chances.

Cross-examination.

(By Mr. GRAY.)

I have never had any experience in floating any large loans. The going rate of interest in Kootenai county will go from seven to twelve per cent in the banking business; possibly sometimes a little higher, sometimes a little lower. The average going rate of interest is from seven to ten per cent. We haven't any seven per cent loans in our bank; they [468—184] are from eight to ten per cent. I can borrow money at seven here. The rate depends on the size of the loan. The aver-

(Testimony of Earl Brown.)

age rate of interest on the loan of our bank is about nine per cent.

Redirect Examination.

(By Mr. WERNETTE.)

Those are short loans; practically all small amounts. A few thousand dollars, the maximum, down to very small amounts.

**[Testimony of Walter H. Graves, for Defendants (Recalled).]**

WALTER H. GRAVES, recalled on direct examination, by Mr. ELDER, continued:

I have constructed dams; I do not recall any special dams now, but I have built a great many, different kinds of dams, concrete, masonry and crib dams; I have been at it forty years; I have never built any great structure that cost forty million dollars, but I have built dams that cost quite a little money. I am close to 64 years old. I have had experience with preliminary surveys of hydro-electric plants; I have made a great many of them and a great many reports of them in this part of the country. I made one for Mr. Strahorn and his associates over on Priest River a year or so ago, involving an expenditure of three or four million dollars. I made an examination survey for the proposed dam on Snake River down near Pasco, at Five Mile Rapids, one up above Lewiston on Snake River, and some dams on the Wa-ha Irrigation project that cost three or four hundred thousand dollars.

If I were sent to examine a site for a hydro-

(Testimony of Walter H. Graves.)

electric [469—185] plant, the first thing I would take into consideration would be the character of the ground about the site, that would be the matter of first consideration. The next thing I would do would be to ascertain the discharge of the river; that is a very essential feature, to know the maximum discharge and the minimum discharge, especially the minimum discharge because upon the minimum discharge of the river depends the maximum power capacity of that plant. I would hunt up the records of the discharge of the river and the flow and precipitation over the drainage area, and all that sort of thing. After I had been satisfied on that and made up a tentative plan as to the idea of the plant, the next thing would be to examine the foundations of the dam, if a dam was contemplated, and a dam is generally contemplated in relation to a hydro-electric power plant. I would find out the foundations and see whether they would be proper or would sustain the dam I had in mind. When I was satisfied on those points I would commence to work up the details of the dam, to get the measurements, etc. and therefore the maximum capacity of the plant. After ascertaining that I would proceed to work out the plans of the plant, to utilize the maximum power to be gotten out of the site.

I would take into consideration a reservoir site. A reservoir on a stream is a prime factor. It so materially augments the capacity of the plant that, if a reservoir site is available, it sometimes determines the question whether a plant is advisable or

(Testimony of Walter H. Graves.)

otherwise; and very often if a reservoir site is not obtainable, then the [470—186] next question is, how feasible is it to build an artificial reservoir.

I would consider the market. I have been operating and living in this country for the last thirty years, off and on. I think I am well acquainted around Eastern Washington and Northern Idaho. I know the locality. I think I can form a very good opinion in regard to what the market for electricity in this community is. In my opinion, the market is exceedingly good, and with the prospect of increasing and becoming better for a long period, if not indefinitely.

In my opinion, the fact that a power plant or power site at Post Falls increases the horse-power of plants down the river from Post Falls adds value to the Post Falls site. The fact that the company is a going concern adds value to its plant.

In attempting to arrive at the valuation of the Post Falls plant in capitalizing the net income of the company, I think five or six per cent would be ample; if I were attempting to arrive at a capitalization I would take five per cent, in my judgment, as the rate to capitalize it on. Taking into consideration a reservoir here and the value which I say, in my opinion, is added to the Post Falls plant by reason of the benefit to the other plants, and assuming that the net income of the Post Falls plant is \$164,166.14, and the value of the transmission lines, substations, and so on, in Shoshone county, to be approximately \$262,000, and the assessed value of the easements and over-



(Testimony of Walter H. Graves.)

flow lands in Kootenai county to be approximately \$201,000, and the value of the pole lines in Kootenai county approximately \$183,000, figured at the rate of five per cent, [471—187] under those conditions, the value of this plant would be about \$2,636,616.55 on that capitalization.

Assuming that the output for the year 1910 of the Post Falls plant was 57 million kilowatt hours, and that the net earnings for that year or the average net earnings for three years was approximately \$164,000, and that the capacity of such plant is 15,000 horse-power the value of the plant would be \$2,850,000. I figured interest at the rate of ten per cent in capitalizing that.

On cross-examination by Mr. POST, witness continued:

I graduated from the Illinois Wesleyan University. The first dam I built was when I was a young man, along about 1870. I have built a number of dams for hydro-electric power plants. The first one I remember now was near Montevista, Colorado. I am quite sure that dam is there now. That was built about 1880. It was for the Montevista Electric Light and Power Company. I built it; I paid for a good deal of it. I was the principal stockholder in the company. It was a concrete dam; not of the same material as the dams at Post Falls. It was a rubble concrete dam, that is, concrete and boulders, cyclopean concrete they call it. It was practically like these dams at Post Falls. It was in height probably 30 or 40 feet. I don't remember now how much

(Testimony of Walter H. Graves.)

it cost. It cost me personally about ten or twelve thousand dollars, my share of it; that is what I lost in that proposition. It has been a very profitable plant, but I lost. I was the promoter.

I built a dam at Derango, Colorado, and one at [472—188] Silverton, Colorado, I can't tell you the names of the company. That was away back about 1880. I didn't promote that enterprise. I can't tell now how big a dam that was; it was probably 30 or 40 feet high; possibly a couple of hundred feet long. Probably cost 20 or 30 thousand dollars; I couldn't tell, it might have been 40 or 50 thousand dollars. I installed the dam, drew the design for it, specifications, and built it. We certainly did generate some electric power with it; I don't remember how much. It was a town of about two or three thousand people; I expect we had 12 or 15 hundred kilowatts when it was first put in. I finished it up a year or so after I began. I saw it about eight or ten years ago. It was a masonry dam.

I can't tell you the next dam I built; I built one at Silverton and built one down at a place near New Hickory, New Mexico. The character of the Silverton dam was approximately the same as the Derango dam. I think it cost a little more than 40 or 50 thousand dollars.

I built a dam up in Northern Montana; I built one on the Little Horn river. That was a brush dam, made of brush. It has been there for 20 years; it is there yet. I built one at Fort Belknap; that was a rock-filled dam; that was not a hydro-electric power

(Testimony of Walter H. Graves.)

plant, it was a straight pumping scheme for irrigation. It cost about \$175,000, the dam and pumping plant; I don't know what the dam cost; they were both together. That was somewhere along in the 90's, twenty years ago.

Right up in that neighborhood we built an irrigation dam, a storage dam; that was about forty miles out in [473—189] the mountains from that place. That was built of earth with a concrete core; that cost perhaps \$300,000, something like that. I built that for the Government. The name of the project is, the Fort Belknap Indian Reservation. I was superintendent of irrigation for the Government. I ceased as such in 1901. I worked for the Government for eleven years as engineering inspector, superintendent of irrigation. I don't know when I next saw this irrigation dam, it has been a number of years; I fancy ten or twelve years.

I couldn't tell you the next dam I built; I don't remember. I built a dam on the Gila river near Florence, Arizona. That dam was built for irrigation, pumping. It was built of crib, rock crib dam. I have forgotten the name of the reservation there. It is for an Indian reservation. Florence is the nearest place. I can't recall the name of the project; if I had a map I could tell you. That was some time in the '90's.

I put in a dam on the Grand River above Grand Junction, in Colorado. That was an irrigation project and rock-filled, crib dam, cost probably \$185,000 or \$200,000. I put in a dam over on the Klamath

(Testimony of Walter H. Graves.)

Indian reservation on Sprague river. That was a rock-filled dam, probably cost \$150,000, maybe more; I don't remember. I have never built a concrete dam just like the one in question in this case. I told you about one or two concrete dams I built. I have not built any one within the last ten years. I don't remember what one I built within the last fifteen years. I had charge of that kind of work and was tearing around the country. I quit the Government's service in 1901 and went into private [474—190] practice. I don't remember of building a dam since. I can't recall where I built a dam of similar character as the material in the Post Falls dams. Since I went into private practice I have built hydro-electric plants. I can't recall any just now; I can refresh my memory and tell you later. I know I have not built any in the last ten years. I am not refreshing my recollection now from something, I am reading a letter from my sweetheart. I have not bought or sold any hydro-electric plants within the last 25 years. I have acted as consulting engineer for hydro-electric plants for the last 25 years. I made a report on the Hanford irrigation scheme to somebody who didn't buy it. I believe the plant here at Clarkston was sold on my report. I can't say that was true, but I made a report. I don't remember when I made a report on the Clarkston hydro-electric plant, it was several years ago. I made the report to Mr. W. P. Hurlburt. I have given advice concerning hydro-electric plants built within the last 25 years; I recall one at Idaho Falls. I don't know

(Testimony of Walter H. Graves.)

that that is something W. P. Hurlburt had anything to do with. I made a report for some people that were interested in it, and it was afterwards built. I don't know; I wasn't there. I had nothing to do with the construction of it. I made a report to W. P. Hurlburt in respect to the Clarkston plant at his solicitation, for a man by the name of Clark, that came out from the east with him. I also did quite a bit of work in Idaho. I was in his employ for several years in irrigation work. I was on an irrigation system that involved hydro-electric [475—191] development, three power plants. I was consulting engineer in respect to Hurlburt's promotion schemes probably four or five years. I have seen many bear-trap gates or a number of them, not exactly like the device used at Post Falls; that particular shape of bear-trap gate is not always used. I don't recall now where I ever saw any other bear-trap gate but they are used over the country in a number of places. I don't recall where I ever saw one of them. I recall some place in Pennsylvania, somewhere on the Susquehanna river. The Engineer's Society went up there to see it, and I went with them. I don't remember how long ago that was; perhaps ten or fifteen years ago.

I didn't see a bear-trap gate something like this one at Post Falls on the Susquehanna river but it was a bear-trap dam. I certainly went there with some engineers to take a look at it and I took a look at this one at Post Falls. There is just a difference in the way the leaves are closed; the same general



(Testimony of Walter H. Graves.)

patterns and device. I have seen the tainter; those things depreciate. Besides the concrete that depreciates at Post Falls there would be the superstructure, the gate, and anything of that kind. The substructure doesn't depreciate very much. I don't remember how many tainter gates there in those dams. I don't remember how many tainter gates in the bear-trap dam. I think there are two gates, as I saw it. It has been several years since I saw it. I have been here on this case for several days. I didn't go down there Sunday and look at the dam. The last time I recollect that I saw the Post Falls property was about [476—192] three years ago. I can't remember definitely. I went down to Post Falls at the time I was up in this city as a witness against the Washington Water Power Company, at the time of having the overflow hearing before the Secretary of the Interior. This is not the first time that I have appeared as a witness against the company. I couldn't tell you when it was I visited the dam; sometime several years ago. I have been through the power house. I don't remember with whom I was; it was some of the engineers. I don't know who he was. I have been several times. Generally with some of the engineers, I don't know who. I can't give the name of anybody. The bunch of engineers that were with us at the time that you refer to and myself examined the dams. That is not the only time. I was there before that, when they were constructing it, and I have been there at least once since, and possibly twice, I don't remember. There

(Testimony of Walter H. Graves.)

are three dams; I don't remember how many gates there are. I can't tell you how many gates altogether there are in the dams. I haven't any way of charging my memory with that and can't tell you anything about it. I can't tell you the size of any of those gates. I fancy those bear-trap gates are about fifty feet in length, as I recall; I didn't measure them. There are quite a number of other gates besides bear-trap gates. I don't recall now approximately how many of them or how big they are or what they would cost. The depreciation would be larger upon those. Besides the gates there is quite a quantity of iron there, in relation to the gates, I don't remember of any iron there except in relation [477—193] to the gates. I could only give an idea of what proportion the cost or value of those items that depreciate is. I would say it was a small proportion; it was a lesser proportion. I didn't figure it out, any way. I figured that the concrete portion of the dam depreciates very slightly. I will tell you how I figured that depreciation. It has been customary among engineers for many years to figure masonry dams at about two and  $2\frac{1}{2}$  per cent depreciation. That subject was recently discussed over at the Engineer's Society in Seattle in regard to the Anderson concrete dam and it was almost universally admitted that the depreciation of the Anderson dam would be less than one per cent. That was the consensus of opinion among the engineers. The concrete that forms a larger proportion of this dam will depreciate no more than the granite rock upon which it is built; there is a slight depreciation and wearing

(Testimony of Walter H. Graves.)

out of that rock; it takes many centuries for that rock to wear out. This concrete down at the bottom of that dam will probably be there several hundred years from now. And in a monolithic structure like that, unless some earthquake or something like that happens, is practically indefinite. The depreciation occurs on the superstructure. The concrete tied into the solid rock is as enduring as the rock itself, generally, and engineers so regard it. I would figure the depreciation at some figure, one per cent or a fraction of one per cent; it would depend on whom I was figuring it for, whether for a buyer or a seller. Figuring it for a buyer who answers a good many of my questions for [478—194] me I would be governed by depreciation, or element, or factor of depreciation, largely by what it was for. If I wanted to know the truth myself, I would figure it; if I was figuring for the purpose of sale for somebody and my employer wanted it figured, I would rather be governed to suit his case.

Just to get at the truth, the depreciation upon that sort of a dam, built wholly of concrete, no iron, no nothing of that kind in connection with it, in a foundation like that, my judgment would be to put the depreciation at probably from half of one per cent to one per cent. If this dam would stand and last forever, I would figure depreciation at those figures because it is customary. I would figure by my general judgment of having seen these things and investigated them and heard the matters discussed by engineers. That is the way that I arrive at my conclusion.

(Testimony of Walter H. Graves.)

Depreciation is the natural wasting away of anything that is in use. Every structure depreciates from the time it is constructed. It would depend on what you meant by the term depreciation; as to whether it covers nothing except natural decay. The question of depreciation is a very complicated question. It is so related and inter-related with a great many other matters—the matters of obsolescence and supersession and inadequacy, and a lot of those things; it is so inter-related with those things that after you start to consider the question you can very easily become involved and confused with all sorts of conclusions, and it depends very largely upon the individual judgment of the man [479—195] that is figuring as to the value of the various factors; by combining and relating to these things you can get almost any result you want. Therefore, there is a very wide range of opinion among men that are equally competent as to just what depreciation is and what its rate is.

I wouldn't use the term depreciation to include within it inadequacy, obsolescence and supersession, under some circumstances. By supersession I mean where a thing is superseded by something else. When I gave the figure of one-half to one per cent. depreciation per annum I certainly did not include inadequacy and obsolescence.

I would have to see the gates before I would figure as to the rate of depreciation on them and the other things in the dams besides the concrete. I wouldn't express an opinion on the depreciation of the bear-trap dam as segregated from the rest of



(Testimony of Walter H. Graves.)

the structure there. The one per cent covered on all the dams. Every dam has some gates. I fancy the gates are of iron or steel; I think there is some wood about them. And I didn't, when I figured one per cent on the whole dam as a structure, figure on the value of these gates or the rate of per cent upon the gates or the relation that the value of these gates bore to the whole structure, in order to get this one per cent. There is a pumping plant that belongs to the city below Post Falls and there is a plant at Spokane and plants at Nine Mile and Little Falls. I have seen the Nine Mile plant; I have been in the power-house; I have seen the power-house of the plant at Spokane only from the outside. [480—196]

If you figure in relation to the capacity of the dam here to increase the capacity of the output of those plants below, I would say that the value of the plant at Post Falls is greater because there are some plants down the river, but not simply because there are similar plants situated in the same country that have no relation. If I owned the Post Falls plant as it is now, I should regard its value very materially greater by reason of the fact that there are other plants down the river and the probability of constructing still others besides those now in existence; simply because the plant at Post Falls has an apparatus and appliance for controlling the storage water an area here amounting to 50 square miles and running into 200,000 acre feet. That water you can let out during the low period, and



(Testimony of Walter H. Graves.)

you can augment the output of those plants down the river possibly on an average of 100 per cent.

I am going to get money out of that in this way: If I own something that will contribute to your output even if I got nothing out of it, if I own something whereby I could augment your income 100 per cent, wouldn't I as a disinterested and philanthropic citizen, figure that I would be of great value, if I got nothing out of it, but the chances are I would get something out of it.

In talking about market value I am talking about hard cash. I would get cash out of the fact that I had benefitted somebody down near the Columbia river, in this way: If you owned a plant down there and I wanted to convince you of the value of this, I would open my [481—197] gates some spring when the water was high and let all the water go through. When the low water period come the low water discharge of the river would measure the maximum output of your plant. Next year I would close those gates and store a very large amount of water and by letting that out during the low period I would increase your output probably by 100 per cent. When you had thoroughly realized that, you would hasten to me and make some kind of agreement in regards to storing that water.

Supposing I had that power plant at Post Falls and had electrical energy, had contracts with the mines in the Coeur d'Alenes to furnish them power and had all our power contracted for, I would have to operate that power plant in order to furnish this

(Testimony of Walter H. Graves.)

electric energy to the people and the general public I am serving in Northern Idaho.

The example I gave was merely a supposition; in other words, I couldn't indulge in any such scheme as I have suggested, to get cash out of the chaps down the river. That was just an idea to illustrate its value. As a matter of fact, I would have to let the water out through my plant to the people down the river, and it is my opinion that I wouldn't have any way of holding them up and compelling them to pay tribute to me if I manufactured electric energy and supplied it to the people of Idaho as a public service corporation.

I wouldn't contemplate seriously operating that way if I owned the plant; I would simply feel that I was creating values incidentally for myself. [482—198]

It isn't true, where you take a rapid-flowing stream like the Spokane river with several plants and a dam, that as you go down the river each dam holds back some water for storage. It is true that the Nine Mile plant holds back the water and creates a lake there at Nine Mile; but if that lake should fill up with sediment it wouldn't injure the Nine Mile plant at all; that dam is built for head, not for storage.

If I take the output of this plant in 1910 as 57 million kilowatt hours and the net earnings as \$164,000 and the capacity of the plant as 15,000 horse-power, I say that the value of the plant as Post Falls, just the Post Falls plant, would be

(Testimony of Walter H. Graves.)

\$2,203,000, at least that. In my judgment it would be worth more than that. I would figure it as a business investment. I would have to go through that if I was going to get definite figures as to what it might be worth. That would take some time. I would have to know more particulars than I do. Assuming that statement of facts, I would say it was worth about two million dollars. That is my judgment, on those assumptions.

The way I arrive at that \$2,200,000 was to take that output and determine its horse-power, and then ascertain its value, the horse-power value, in relation to the net income, and assume that that was approximately the net value of the horse-power; and then assuming that it was possible to develop 15,000 horse-power, to get the rates, and the capitalize that at ten per cent, then deduct the value of the outstanding plants, as has been testified to here. [483—199]

There is quite a difference between 15,000 horse-power and 57 million kilowatt hours, probably 50 per cent. That is, the 15,000 horse-power is 50 per cent more than the actual output for last year. That is on the assumption that that is the ultimate capacity of the plant. That is on the assumption that you could make this plant produce instead of 57 million kilowatt hours 50 per cent more than that. That is on the assumption that what they were actually producing in the year 1910 is only one-half of what they might produce with the same dams and power plant, possibly with other instal-

(Testimony of Walter H. Graves.)

lations. I don't know what they have got installed there at this time; I have not seen it lately. I don't know whether with the appliances they now have there they could generate 104 kilowatt hours instead of 57 million, but with the supply of water they have I fancy they could. With the supply of water they have and the head they have they could develop 57 million more kilowatt hours. Whether they are ready to do that now or not I don't know.

Under that assumption I capitalize that at ten per cent, because you had introduced evidence bearing on that as the proper rate of interest; not that I consider ten per cent as a fair rate for capitalizing a plant, I think I consider 5 per cent as a fair rate; I don't know as I could say that on any hydro-electric plant no matter where situated, but on a large plant under conditions like this, yes. I consider the market perfect; that is, there is no question about the market, either as to the present or the future. The market is in the surrounding country.

In the first place you have testified to a market in the Coeur d'Alene country. That market is made up [484—200] largely of five year contracts. That takes care of that market for the immediate future. I don't regard the Coeur d'Alene market as hazardous for this reason. The Coeur d'Alene mining camp is the result probably of 20 years development; it is not a mushroom mining district, and even at its high water period at this time there is nothing indicating that it will subside to nothing in the immediate future. There are ore

(Testimony of Walter H. Graves.)

bodies enough in sight. That isn't all. That whole country up and down the range here for 50 or a hundred miles is, as anyone that is familiar with it knows, known *at* a mineral bearing country. There is every reason to believe that other mines will be discovered; there are large bodies of lead and silver known to exist further down towards Salmon City; there are some big mines down there with known deposits of lead and silver. The only reason they have never been developed is because there is no transportation down there. It is quite a ways from Post Falls. But I only refer to that as an evidence that the whole range is mineralized.

Supposing the mines should give out entirely this is in the midst of a country of undeveloped resources. It is surrounded by a country that will sooner or later be settled up, and in all probability densely settled. It will be an agricultural country. They are introducing very rapidly electricity into agricultural districts, into the suburban districts; over on the coast they have learned that. They have learned that if they put the price of electricity down where a farmer can get at it he will use it on his farm, and they are using it on [485—201] the farms, and they are using it in the suburban communities very largely. This whole country to the south of us is covered with timber. They are introducing electricity in the logging operations and the milling operations, and after the land is logged off they will introduce electricity to remove and clear the stumps, and the land will be settled and



(Testimony of Walter H. Graves.)

occupied as agricultural land. As the land is settled up, towns grow up and manufacturies grow up, and there is every reason to believe that the market will increase. Those are some of the reasons that I would advance as to the permanency of the market for this plant. I wouldn't consider it hazardous in any sense. And the further fact that nearly every power-plant on the coast or in the west here has had a market for its product almost as soon as it was installed and developed, and scarcely any large hydro-electric plant has been installed on the coast that hasn't very soon thereafter been compelled to install a steam auxiliary to augment their output. There are no electric light plants or hydro-electric plants in this section of the country that been constructed any length of time with a surplus of market on their hands; I know that.

I don't consider that this mining business in Shoshone county will continue as good as it is now forever. I haven't any idea of how long to figure on that. When the mines play out I didn't say you will sell the power, instead of to the mines, to settlers on logged-off lands in northern Idaho. I figure this way, that by the time the mining industry would [486—202] reach a stage of utter nonproduction, in other words, there would be no mining industry in this country, that the country would be so densely settled by rural population, agricultural people, and the use of electricity will become so universal among them and in the industries that grow up incidental to that settlement,

(Testimony of Walter H. Graves.)

that there will be a market for all of the power that this company will produce at all their plants.

They are trying the experiment, in order to sell to these small farmers, of putting the price down, over on the coast, and successfully. The small farmer cannot pay 15 cents per kilowatt hour, no, sir. They could buy it at the price now sold to the mines, they could afford to pay that. The possibility of other power competition up in that neighborhood is a very small unit. The Thompson Falls plant is a reasonably large plant. I have never seen it. I know nothing about it except on hearsay. Ultimately you would sell the power of Post Falls in this region of country hereabouts, in Kootenai, Shoshone and Bonner counties, within a reasonable transmission distance. I figure there would be a market for all of it, in addition to being in competition with the two power companies that are in Spokane. I also figure, in figuring upon the value of this property, that the Government or state, either through the legislature or through a public service commission, would have the power to regulate rates of service. I don't know of any public commission that has regulated rates to the annihilation of a power plant. The tendency is to regulate downwards, to squeeze out exorbitant profits. When you regulate the [487—203] rates downward you decrease your earning power, and when you decrease your earning power you decrease your capital account, or rather your value based upon a per cent.

(Testimony of Walter H. Graves.)

When I was asked the hypothetical question about the output of 1910 as 57 million kilowatt hours and a capacity of 15,000 horse-power I understood the question to mean a continuous capacity of 15,000 horse-power, the way horse-powers are operated. Horse-powers are operated to the full capacity; there is a variable load on the horse-power plant. I figured on an average capacity of 15,000 horse-power. I didn't think the question meant anything different from what it stated. The only way I could answer that question would be on the hypothesis of a continuous 15,000 horse-power day in and day out 24 hours of the day, and that that 15,000 horse-power was the output of the plant. Presumably, when I figure on an average I also figure on a maximum and minimum, whatever would produce that as an average, it might be one per cent above and one per cent below, or half a per cent above and half a per cent below. It depends altogether on the kind of contracts and the kind of service you are giving. When you figure on your output you must figure on your minimum because you have contracts with people furnish them with electric energy all the time. Take the service furnishing now to mines that operate 24 hours a day, you have got to figure on your minimum capacity; but that is not the case ordinarily with power plants. I can't estimate any maximum capacity in this plant. I have figured on the abstract proposition. It is a matter of calculation [488—204] how much water it would take to make an average of 15,000 horse-power; it would

(Testimony of Walter H. Graves.)

depend on the head. I stated that I visited the plant several times. I don't know the head there. I haven't figured it out whether this plant produced 15,000 horse-power or not.

**[Testimony of E. Tannatt, for Defendant.]**

E. TANNATT was called and sworn as a witness for the defendant; on direct examination by Mr. ELDER, testified:

My name is E. Tannatt; I reside at Spokane, Washington. I am a civil engineer, graduated from the Washington State College and also attended the University of Illinois. My experience as a civil engineer commenced in the early '80's, commencing in the railroad work and general engineering and surveying, later in charge as chief engineer of hydraulic work and work of that nature in the island of Hawaii for six years; for five years professor of civil engineering at the Montana State college, and for the last four years have had an engineering office in the city of Spokane.

In the actual construction of hydro-electric plants I have had no experience, but I have had experience in charge of general construction, on the Hawaiian Islands principally, for the Wya-loa Agricultural Company. My work was largely more generally in the nature of designing and engineering than it was in actual construction. I attempt to keep posted and up-to-date on principal magazines on engineering; I have lived in Spokane the last time for about four years. I came to the state of Washington in 1881. I am familiar with the Spokane

(Testimony of E. Tannatt.)

river. [489—205] The Washington Water Power Company controls the waters of the river at Post Falls by means of a dam which impounds the water above and in Coeur d'Alene Lake and also regulates the control of the flow of the water below the dam. They can increase or decrease the flow of the river below the Post Falls dam by the regulation of their gates and the waste water passes through their gates. They do that, I know, by actual measurements. I measured the river in the earlier years and also have had occasion to measure it within the last two or three years several times.

There is an increased value in my mind to the Post Falls plant by reason of the fact of the control of the water at Post Falls for the plants below the river; due to the fact that the peak loads on the plants below Post Falls can be met by an increased water supply from above; also that the peak load occurring at the Post Falls plant requiring the use of water has already developed power. Knowing the time that is required for the increased volume to reach the lower plants, it can be taken advantage of in the lower plants in maintaining a peak load at that point; so that by simply knowing the time it takes water to pass from one point to the other, with proper management and proper engineering, it undoubtedly is taken advantage of. The water is of increased value over what it would be if the plants were owned individually and not under the same management.

I am familiar as an engineer with the rate of



(Testimony of E. Tammatt.)

interest which is charged in this community, that is, Eastern Washington, Northern Idaho and Eastern Oregon, [490—206] by engineers in capitalizing when using net income of a corporation such as the Washington Water Power Company. I know in connection with a number of pieces of work in which I have been engaged. I have been associated with eastern engineers in estimating the value of proposed power developments, and that estimate has been more or less based upon the net earning capacity in relation to its valuation, that is, the valuation has been based upon the net earning capacity. The rate used is from 5 to 6 per cent. We based it on the eastern value of interests on eastern money, because the money is borrowed largely from the east, in the larger developments, and the money is practically eastern investment. The larger plants are not financed in the western country; they are almost entirely from eastern capital.

I have had occasion since my residence in Spokane to inform myself as to the market for hydro-electric power in this community. I don't consider the market in electricity a hazardous one, for this reason that where water-power can be developed within a certain cost the money can be readily raised for that class of investments.

Cross-examination.

(By Mr. GRAY.)

That plant in the Hawaiian Islands is a plant in which the water is taken from three streams, brought through the divides of three mountains into a large

(Testimony of E. Tannatt.)

storage reservoir; the water is then carried down the mountain sides for a distance of about a mile and a half or across to a vertical drop of between three and four hundred feet. The power is there converted into electric energy used on the plantation, and the waters are there [491—207] carried onto the plantation for irrigation purposes. The power generated is variable, depending upon the amount of irrigation; the irrigation is the factor that controls the power in that particular case. I do not believe I could give you the figures as to the size of the power installation there, the capacity of it. It is in the neighborhood of four or five hundred horse-power. The amount actually utilized on the average is variable; it will run from three to four hundred horse-power on the average. That power is transmitted to different parts of the plantation and used in power developments. Electric lights part, and power also. The sugarcane is ground by gas. The power is used for transmission. That is not the only power installation which I have ever designed or constructed; that is the only one I have ever had actual absolute charge of the construction of. I have never been engaged on any other in actual construction. None have been constructed upon my designs. For four years I have been in Spokane in private practice. My work has been throughout the states of Montana, Idaho and Washington. No hydro-electric plants have been constructed that I have done any work upon; none are in the course of construction which I have investigated or designed.

(Testimony of E. Tannatt.)

I make no point of that class of construction. For the last four years in Spokane I have been following particularly the class of hydraulic development pertaining to pumping and irrigation and am not following hydro-electric practice, although I am a hydro-electric engineer. I have been working in Oregon for the John [492—208] Day Power Company; I reported for them; also for Dr. N. J. Blaylock, the plant which was sold by Mr. Graves, the plant that is now owned by the Great Northern Railroad Company at Chelan. That plant, I understand, was sold and financed practically on my report.

We put in a considerable plant for the Blaylock Orchard Company at Walla, artesian wells, and a pump; I designed the pumps and the development for them. That is in a way for the distribution of water around that farm. This Blaylock Development on Lake Chelan, that is the Chelan Water Development, at the time was partially developed. I made a report on the method of development, and that method differing from any system that had been reported upon prior to that time, I am informed, was sold through this report. That I think it has not been since developed for the reason that it is held by the Great Northern Railroad Company. It would have been about a five million dollar proposition, with the John Day Power Company, if it had been carried through. It was not carried through.

I appraised a public utility. I appraised the Pacific Light & Power Company's plant, at Pasco, for the city of Pasco; that is the system that supplies

(Testimony of E. Tannatt.)

the city with water and electric lights; that was for the city, to advise the city as to the value and cost of that plant, the present value. Using the word investigated, I have not investigated except with reference to this particular dam, the effect or the value of a controlling works upon power streams; because investigation means purely from your personal inspection. As far as studying [493—209] the matter with other engineers who have been in charge of such works, and approximating my value of it from a method that is not purely investigation under my understanding of the meaning of the word, I have. I am familiar with the Post Falls plant only in a way. I have known the plant from the time it was started, but of late I have not seen the plant; haven't seen it for several years since completion. I was last there four or five years ago; I can't give you the date. It was still in the course of construction. I don't know what the power development is at the present time or was in the year 1910. I wasn't there in January, 1911. I say that the works at Post Falls can control and do control the flow of the river. I know it by actual measurements. I was called upon here sometime since, within the last two years, to measure the Spokane river repeatedly for a proposed power development. I had also measured the Spokane river in earlier years before the Post Falls plant was in, and I found in making these repeated daily measurements that at certain periods of the day we had an increase in the flow of the river, that is, the readings were not the same.

(Testimony of E. Tannatt.)

We were trying to get an average, and a low-water flow at that point. At the time this was taken the investigations we carried on showed it corresponded as near as we could estimate to a night load at Post Falls.

As you should be aware generators controlled by water wheels have their governors, in which, when the load comes onto the generators the gates of the turbine wheel are automatically opened to allow more water to pass. If there was a large peak load, in that instance [494—210] we would have more water going down the river during the period of the load and as nearly as we could estimate your peak load occurred at a certain hour corresponding to about what the flow of the river would give; the velocity of the river would give the increase of the power at that time. This proposed water development was at the Trent railroad crossing. One of our measuring stations was there; the other one right above there. I didn't read these every hour but we had men that read them every hour. I put in a station and made the actual reports, about six times during the season. We obtained the depth, and then I had my sheet showing the velocities at the different depths, so that we could get the quantity. That was within the last two years. I can give the time of year by referring to my notes. I haven't my notes here; I came unprepared for anything of that kind. It was as early as four or five o'clock in the morning we made these observations. The fluctuations of the river were such that we wanted to



(Testimony of E. Tannatt.)

make a special study of it. I went there early in the morning, in the middle of the day and late at night repeatedly. I couldn't give you the exact number of occasions. As I recall, the flow of the river was greatest about eleven o'clock in the morning. I couldn't tell for a certainty when it was lowest; it was early in the morning, because we made the most trips to try and find the lowest point. I didn't say there was an increased value to that property at Post Falls by reason of the fact that the Washington Water Power owns other plants in the state of Washington. I said that there was increased value [495—211] due to the fact that the river could be controlled. The increased value is due to the fact that they can control the flow of the river from below the Post Falls plant and the other plants in operation below that can be regulated to take advantage of that increased flow. I wouldn't say that is taking into consideration the dams solely from the standpoint of a reservoir, rather than from the standpoint of a power development at Post Falls. No such consideration as that eliminates the value of the property at Post Falls as a power development. If you can take water once and use it, and then arrange a lower plant so as to use that same water at the time when its maximum reaches its plant, and have a maximum at your lower plant, and then repeatedly use it, you have made the water of far greater value than if you simply had a controlling works here at this plant, because you have taken advantage of the control in the first place.

(Testimony of E. Tannatt.)

The measurements I took were some ten miles above Spokane. I wouldn't attempt to say how long it takes the water to go from there to Spokane. I wouldn't attempt to tell the hour of the day. I wouldn't attempt to tell how fast the water flows above there. I didn't attempt to determine that, only as an average. You will find rapids and you will find still places all the way down. You must remember that the city waterworks comes in there and again controls your plant. I would say the city waterworks are more valuable because of the control of the water at Post Falls. If the Washington Water Power Company owned the city pumping station [496—212] the Post Falls plant would undoubtedly be more valuable because of the fact that the city has a pumping plant and power station at Spokane. It would either have to be that the ownership must be the same in order to make the property more valuable or the control would have to be agreed upon below; that is, any mutual agreement with the other owners. For instance, you could make the city waterworks of more or less value, depending upon your control, within certain limits.

If you could switch the load it would make the Post Falls plant as a power site more or less valuable. If you were operating the city waterworks as your principal factor then there would be a certain amount of value that would be increased to the city waterworks, and there is an increased value at the present time, in my mind, for the reason that you have made the flow more even in the river than it

(Testimony of E. Tannatt.)

used to be in the early days. That undoubtedly makes the Post Falls property more valuable. It is the key to the whole situation. If you owned the city waterworks then there would undoubtedly be certainly an increased value. Assuming that the plaintiff owned any plants below Post Falls the fact that the water is controlled would give the site additional value. If the controlling works at Post Falls are used for the purpose of controlling water plants further down the river it would affect the Post Falls plant so far as its value is concerned. There are some power plants in the Spokane river below Spokane; there is one at Nine Mile, owned by the Inland Electric Company. I couldn't tell you when this peak of the water gets [497—213] down to the Nine Mile plant. I haven't investigated that. That plant would have an increased flow whenever you could so control the excess water that would pass through your wheels, wherever you could so handle that water as to make it meet a corresponding peak load down the river, regardless of whether the plant was owned by the plaintiff or any other company, that would give to that plant down the river an increased value which would reflect an increased value to this Post Falls plant.

Every plant on the river from the Post Falls plant down would have an increased value from your control. They wouldn't all be having the benefit of this high flow of water at the same instant; some might be in a position where they couldn't avail themselves of it. I couldn't say whether there would be only

(Testimony of E. Tannatt.)

one really benefitted within a distance of forty or fifty miles. I think every last one of them would be benefitted from the very start to the very finish by the control of the water. It would be worth money only to the property down the river. The Post Falls plant would be benefitted by assisting in harmonizing the condition at the Post Falls plant with the plant lower down the river. You might, by doing that, affect the efficiency and the value and the output of the Post Falls plant as a plant.

I have spoken of five to six per cent being the proper rate upon the net proceeds in hydro-electric plants. An investment of six per cent on the net, represented by the net proceeds of the plant, a proposition that eastern capital will jump at. I couldn't give you the names of any individuals controlling eastern capital [498—214] that is invested in any such investment, but I know of capital being invested. To state that I absolutely know of a dollar being in your pocket or mine is one thing, but to state that I should judge that is different. I can't make a statement giving the names of any individuals or of any capital being invested upon such a proposed earning as that and I won't. I can't say that I don't know of any.

The prevailing rate of interest on farm mortgages in this country is about 8 per cent. I don't consider that investments in power developments, hydro-electric plants, are more safe than farm mortgages. It isn't always a question of safety in an investment. A farm mortgage, for instance, we are handling at

(Testimony of E. Tannatt.)

the present time at 8 per cent; the money is loaned at six per cent by eastern parties; two per cent of that is handled by Spokane people. That is purely an investment.

In water-power development almost invariably a development, as the Washington Water Power Company would indicate, has been at an increased valuation, besides the original capital, so we will have an increased value in the holdings as well as in the rates to investors.

I said the rate of interest which I gave is really what is the prevailing rate of interest on eastern capital; that is the way I want it understood. There are hazards in water-power development, but those hazards are not necessarily purely in a line of power development itself. The danger of being controlled by large corporations is one of those hazards. And the danger of being controlled by the state is a risk. And the laws [499—215] of demand and of market; you are liable to lose your market. But at the same time those are the same conditions that apply to practically any business proposition that comes up. Under some conditions there is hazards from competition. There is very little hazard under present conditions, to my notion, of competition. I am familiar with Thompson Falls. The plant has got competition there for 80 per cent of the output of its plant. I know where Kootenai Falls are. There is liable competition there. Those cases should all be taken into consideration in determining a fair rate of return. I made some surveys upon the Priest



(Testimony of E. Tannatt.)

river for a power plant. That would hardly come in competition with the plaintiff company. My report was to the effect that that should not come into competition with the plaintiff. That was a local development. But these others I have mentioned might come into competition. Those should not be taken into consideration in determining what should be earned when you are figuring on the net income. If I understood the question, it was the net income, the net returns upon the plant, six per cent upon the net returns of your plant for that year. I have taken into consideration the hazards in allowing 5 to 6 per cent. The business management should take it into consideration. You have hazards and you also have advantages that you have to take into consideration as a while.

**[Testimony of Boyd Hamilton, for Defendants.]**

BOYD HAMILTON was called as a witness on the part of the defendants, and on [500—216] direct examination by Mr. ELDER testified:

My name is Boyd Hamilton; cashier Coeur d'Alene Bank & Trust Company, reside at Coeur d'Alene; have business connections in Spokane with the estate of J. J. Brown; I am secretary of the Columbian Spokane Investment Company. I am familiar with the going rate of interest in this community, which is charged on loans of a million dollars or more; that rate varies from 5 to 6 per cent, depending upon the character of the loan and the amount of money.

(Testimony of Boyd Hamilton.)

Cross-examination.

(By Mr. GRAY.)

The loan to the Idaho & Washington Railway, five million dollars, was at 5 per cent. That was in the form of bonds or notes. I don't know what those were sold for; the company is not in the habit of giving it out, if they discount them. We note in the records the rate of interest the bonds draw. I don't know in this case what they were sold for. The Panhandle Lumber Company, I think, had a loan of \$1,200,000 at 6 per cent; that was a more hazardous loan because it was on perishable timber. Part of it was covered over perishable timber. I don't know what that was sold for; the specified rate in the loan was 6 per cent. The probabilities were they discounted those for the reason that they were payable any time after 1914, and the people that loaned the money on those securities wanted it to stay out. I don't know of any other million dollar loans. I don't know whether the million dollar loans were on [501—217] the full value of the property or not. That might have something to do with the rate of interest. I have been in banking ten years. The amount borrowed, considered in connection with the full value of the property, has something to do with the rate of interest. The average rate of interest we get in our banks is 8 and 10 per cent. Small loans will average nine and a half per cent, short time loans, 30 to 60 days.

(Testimony of Boyd Hamilton.)

Redirect Examination.

(By Mr. ELDER.)

I know of loans less than one million dollars at 5 and 6 per cent. There was a loan on the Rookery in Spokane, \$300,000, at 5 per cent. There was a loan on the Club building in Spokane, at the corner of Washington and Riverside, at 5½ per cent.

Recross-examination.

(By Mr. GRAY.)

I don't remember whether this Rookery loan was a life insurance loan. That is the best corner in Spokane. I mean the old Club building at the corner of Washington and Riverside; that is one of the best corners in Spokane. In the Sweeney case it was a 5 year loan and they paid one per cent commission. That was on the Rookery. One per cent on the amount for securing the loan.

**[Testimony of J. B. Marcellus, for Defendants.]**

J. B. MARCELLUS was called as a witness on the part of the defendants, and on [502—218] direct examination by Mr. ELDER testified as follows:

My name is J. B. Marcellus; I reside at Boise; I am a civil engineer; I graduated from Kansas University in 1904; I had some practice before; I was rodman on railroad construction previous to that time; I was assistant engineer on the Spokane & Inland Power Construction at Nine Mile during parts of 1906 and 1907. I wasn't chief engineer on the work; I was assistant engineer. That was a hydro-electric plant; 12,000 horse-power capacity; I am in

(Testimony of J. B. Marcellus.)

the State Engineer's office at Boise at the present time; have been there four years last April; I take three electrical engineering magazines and purchase later books as they are on the market from time to time. I run the contour and the profile on Crane Creek reservoir and power development. The dam hasn't been constructed; the power plant has not yet been installed. I visited the plant of the Washington Water Power Company at Post Falls twice; I know the character of the construction, in a general way; I know the amount that is usually figured as depreciation on dams of the character of those of the company at Post Falls; I base my answer on what I say is usually allowed upon Daniel Meade on Water Power Development; and Foster quotes some statistics, what the Government allows on similar constructions. In a general way I have read articles in various places, what they have allowed for depreciation; I have never of my own knowledge constructed a dam and watched its life, so that I can't tell of my own knowledge what the actual depreciation is. There is a great many theories of what it will be; [503—219] I wouldn't want to say of my own knowledge that I know what the depreciation on a dam is, because it might last a hundred years and it might last a thousand. From the information which I state I am testifying from the rate that is usually allowed for depreciation on dams of the character of the plaintiff's is one per cent. Assuming that the net income of the Post Falls plant is \$164,166 and that the value of the transmission lines, substations

(Testimony of J. B. Marcellus.)

and so on in Shoshone county is approximately \$262,000, and the assessed value of the easements on the overflowed lands and the fee lands is practically \$200,000 in this county, and that the value of the power lines in this county is \$183,000, in my opinion the value of the Post Falls plant is \$2,636,616.55. In my opinion the reservoir is a part of the power plant. In my opinion by holding the waters in the reservoir at Coeur d'Alene the company benefits plants lower down the river.

Cross-examination.

(By Mr. GRAY.)

I am a draftsman in the City Engineer's office in Boise. I have had the official title of assistant city engineer. That is a part of my business, draftsman; that is my last title, draftsman. In connection with my work as draftsman in the City Engineer's office I haven't had anything to do with water power plants. I said I ran the top contour and profiles down Crane Creek for the Crane Creek reservoir and power line. Any surveyor can do that. A hydraulic engineer would have to know how to survey. What I did was to make a [504—220] survey; ran an instrument. There is a proposed power development in connection with it. I was assistant engineer down at Nine Mile plant; the chief engineer was Johnson. I was working for Sanderson & Potter, the contractors. They take contracts and do engineering. The company had had a consulting engineer and he came out there frequently. I had nothing to



(Testimony of J. B. Marcellus.)

do with designing the plant, or the plans of it; only the details. As an example, in the bottom of the river I made the soundings and also designed the coffer dams, so that when they floated out they were settled down as nearly water tight as possible. I had nothing to do with the original designs. I measured up the excavations and concrete and such things, as an assistant engineer ordinarily does among other things.

The elements I took into consideration in giving the value of \$2,636,000 were the net earnings of \$164,166.14 capitalized at 5 per cent, giving a value of \$3,283,322.80. Deducting from that transmission lines and substations in Shoshone county, which is \$262,585, the overflowed fee lands, \$201,121.25, the pole lines in Kootenai county, \$183,000, which makes a total of \$646,706.25, gives \$2,636,615.55. That was not all I took into consideration. The fact that the plant controls the flow of the Spokane river at low-water time I took into consideration. If there was no reservoir there the net earnings would be very much less. I took into consideration the control; that is one thing. There is a going-concern value, that also is included in the net earnings. If it were not a going concern their net earnings would be much less. [505—221] They wouldn't be anything then. I considered the market. If there was no market there would be no net earnings. I noted down a few things here—site, location, cost of construction, market, going concern. I didn't divide those items in getting at my total figure into dollars and cents be-

(Testimony of J. B. Marcellus.)

cause they are material to the net earnings, they all contribute to the \$164,166.14. None of those things entered into the mere calculation. I would have to know what entered into the net earnings in giving my calculation in arriving at these figures; that is, I couldn't have given what contributed to net earnings if I didn't know what I considered as entering into the net earnings. I don't know how I could say any more than that I considered those things all contributed to net earnings and those are the things that in my opinion contributed to net earnings, and my answer was the result of a mere matter of calculation and knowing what to consider, for instance the 5 per cent. In determining what was a fair depreciation, a dam will depreciate, but what the life of it is, is theory. I considered that the dam will be there in useful operation a hundred years from now. I never say a dam a hundred years old. It would be a little hard to separate the depreciation of the one article. Concrete, of course, itself will not depreciate. The tainter gates would probably have to be maintained; the wood would rot out, the iron would rust out; there is no doubt about that. I can't answer what I allowed as proper depreciation for bear-trap gates and tainter gates; I took the whole structure into consideration. The depreciation on that portion of the dam is going to be very great, it would be greater than concrete sure. From [506—222] my own knowledge I wouldn't like to give an opinion as to how the bear-trap would cost without at least giving it a close examination. I couldn't really give the de-

(Testimony of J. B. Marcellus.)

preciation on that property. I couldn't separate the depreciation. I couldn't say whether, in all probability, long before they wear out they will become obsolete—the bear-trap contrivances and those tainter gates. [507—223]

**[Testimony of Fred E. Wonnacott, for Defendants  
(Recalled).]**

FRED E. WONNACOTT was recalled on behalf of defendants and testified as follows on direct examination by Mr. ELDER:

I have the 1912 statement. I don't know whether or not this substation is in the same condition it was in 1911. My deputy, Mr. Snyder, who assessed the property in that locality informed me of it. My deputy is not here.

**[Testimony of John P. Gray, for Defendants.]**

JOHN P. GRAY was called as a witness on the part of the defendants, and on direct examination by Mr. ELDER testified as follows:

I was attorney for the Washington Water Power Company in the case of that company vs. Charles Waters and Bertha Waters and others. I believe that statement of facts or bill of exceptions which you have was made without first ordering by question and answer the evidence in the case. I can't testify as to where the original transcript is; I had nothing to do with the preparation of it; all I know is what my office told me. I was present at the trial. I tried the case; I have a fair recollection of some of the evidence given by Mr. MacCalla in that case; I

(Testimony of John P. Gray.)

am unable to say whether he didn't swear to the following facts in that proceeding: "The place where we are in the process of construction of a new plant is what is known as Little Falls, about 15 miles north of Reardon by transmission line, and about 28½ miles from Spokane. We will have part of that plant in operation next fall or early winter, if we have good luck; we expect to have the first unit of 5,000 K. W. in operation then. The low water capacity of the plant, with storage, when completed, will be 19,000 horse-power. The [508—224] increased power down there would be about 6,000 horse-power, by reason of the reservoir, to be exact 5,400 with the installments complete. We get about 5,400 by addition of the reservoir." I wouldn't swear that he testified to that, I don't think there is any such increase of power at Little Falls myself, I would be unwilling to swear that Mr. MacCalla swore to that. I might have certified to that transcript, I don't know; I wouldn't swear to all of the transcripts I have certified to; I do not know what is in all of them; it is impossible. My opinion is, Mr. Elder, that if you have some record that says that, there must be some error in it. I think the increase at Little Falls must be between 1500 and 2000, from my own acquaintance with the storage capacity of the lake, and I can't conceive that Mr. MacCalla stated at that time in that hearing that the lake storage, "will give us a gain of about 5,400 horse-power. Without lake storage we can generate in the neighborhood of 13,600; with the lake storage we can generate about 19,000

(Testimony of John P. Gray.)

horsepower in Spokane.”

Referring to Little Falls, I do not intend to question these things, but some of these questions are put to witnesses on hypothetical cases, assuming that there were  $6\frac{1}{2}$  feet of storage in this lake—I remember all the way through in those trials the question was repeatedly asked, assuming there was  $6\frac{1}{2}$  feet of storage, and that would make the witness answer—and of course, if you take a slide rule and figure it out, that is the way you get to it. Actually there was never more than  $3\frac{1}{2}$  feet of storage in this lake, and when it is put into statement form it is sometimes very difficult to state whether it is asked as a hypothetical question or not. [509—225]

If you take a water curve of this lake, anybody can tell you that there is not at any time in excess of  $3\frac{1}{2}$  feet of storage in that lake. I have examined them; I have been through this litigation, and have been through nothing else much for two years and have heard it explained, in various ways. I have told you that it isn't fair to ask me whether Mr. MacCalla testified: “It will require about three years to make the development. A gain through lake storage to this plant of about 12,000 horse-power, with the total fall developed. Without lake storage we will have 21,300 horse-power, that is, without the lake storage, 21,300 horse-power. That is with the upper falls developed. With the storage we will get 33,400 horse-power, giving a net gain of 12,100. The cost of developing will be very nearly the same. There would be a slight difference in a little bit on the ma-



(Testimony of John P. Gray.)

chinery. The actual machinery is a relatively small part of the total cost of development. In other words, by holding the water of Lake Coeur d'Alene and the reservoir and basin, we increase the power of the Spokane plant from 21,300 to 33,400 horsepower."

I was present at the trial and have a vague idea of what the testimony was. I remember there was some question gone into, if the Washington Water Power Company would develop some more falls down the Spokane, whether they would get some more power. Either Mr. Knight or Mr. McCarthy prepared the transcript in that case and I cannot tell, I was not here at the time the transcript was prepared. I tried the case and went away before it was decided, and the transcript was already printed when I got home. [510—226]

I don't believe Mr. MacCalla testified in that case at that time, "that the elevation of the slack water in Coeur d'Alene River is the same level as the water in the dam, no appreciable velocity, you can tell that by looking at it; there is absolutely no current there. Logs will float with the breeze. It is a physical fact. Low water season in Coeur d'Alene Lake and the Spokane River extends from the middle of July, depending upon the season, to October, up to February, the low-water season, it is lowest in September and October, as a rule. With 6½ feet of storage which the design of the bear-trap will permit storing in the lake, we can develop at Post Falls about 11,900 horsepower, during low water season; during high-water

(Testimony of John P. Gray.)

season we have installed about 15,000 horse-power. During high-water season, there is more than water enough to supply us. Our low water flow at Post Falls would permit us to develop about 5,650 horse-power without any storage. That makes a gain of about 90 per cent, 11,900, about 90 per cent more."

I think I have explained to His Honor that repeatedly in that case there was a hypothetical question put, assuming that there was 61½ feet of storage in this lake, and Mr. MacCalla, in all the litigation, I am sure, always said there was no such storage in this lake, and I know there isn't, and I might just as well, Mr. Elder, ask you if one of your witnesses didn't swear that there was 15,000 horse-power at Post Falls. I do not think Mr. MacCalla so testified. Some of those things, I think perhaps he testified to, but I don't think he ever testified there was 61½ feet of storage in this lake. Mr. MacCalla is now in Australia. He was [511—227] recently operated upon twice. I cannot tell you who reported the case.

Mr. WERNETTE.—Mr. Barstow took the notes and Mr. Barstow read to Mr. McCarthy from the original notes.

**[Testimony of M. D. Barstow, for Defendants.]**

M. D. BARSTOW was called and sworn on behalf of defendants, and on direct examination by Mr. ELDER testified:

My name is M. D. Barstow; I am court reporter of the Eighth Judicial District of Idaho under Judge Dunn. I have been such over three years. I have been court reporter approximately 25 years. I re-

(Testimony of M. D. Barstow.)

ported the case of the Washington Water Power Company vs. Waters. I read to you yesterday certain extracts from my reporter's notes. I have transcribed the portions which I read.

(Said documents were thereupon marked Defendants Exhibits 3, 4 and 5.)

Defendant's Exhibits 3, 4 and 5 is a true and correct transcript of my notes as transcribed by me.

Preliminary Examination.

(By Mr. GRAY.)

There were a great many pages of shorthand notes and these are just excerpts from his testimony, and do not begin to represent all of it on this subject. I didn't go on and read through the record to find out how much there was on the subject. That is all from the cross-examination. The last two I think are from the cross-examination; the first, I think the questions were asked by you.

(Thereupon Defendant's Exhibits 3, 4 and 5 were received in evidence.)

Thereupon it was stipulated that the entire testimony [512—228] of Mr. MacCalla upon the subject should be introduced in evidence as exhibits and filed with the court.

**[Testimony of C. F. Uhden, for Defendants  
(Recalled—Cross-examination).]**

C. F. UHDEN was recalled and upon further cross-examination by Mr. ELDER testified:

I know there is one substation at Cataldo, I never saw it, the plans were drawn under my directions. I do not recall when the original station was put I

(Testimony of C. F. Uhden.)

am pretty sure it was prior to 1911. It has not been dismantled that I know of, I would not necessarily know. The operating department dismantles and constructs stations at times with which I am not acquainted at all. I am not in the operating department. They are not all constructed under my direction; I would say there has been some improvements placed on it in the last year. The station has been improved from time to time.

**[Testimony of C. F. Uhden, for Plaintiff (in  
(Rebuttal).]**

C. F. UHDEN was called on the part of the plaintiff in rebuttal and upon direct examination by Mr. GRAY testified as follows:

Mr. Elder asked me yesterday to figure out certain things. I believe it was concerning the storage, the increase of the power from storage alone. I have figured that out. I know exactly what the area of Lake Coeur d'Alene is, from maps furnished me by the surveyor general's office, of Idaho, and I computed that myself. These were the township maps which we obtained from the United States Surveyor General of Idaho. The map that was sent me from the United States Surveyor General of Idaho was a complete map of Lake Coeur d'Alene, to which he certified as to its correctness, complied in his [513—229] office, from the township surveys surrounding the lake, and from that I computed the area of the lake. These are ordinary township maps; the only map that I know of that will give the outlines of the Lake Coeur d'Alene is the one published by the Inland Railroad System showing their lines, that

(Testimony of C. F. Uhden.)

is, their electric lines from Spokane to Coeur d'Alene, and showing the route their boats travel on the Lake. The outlines of Lake Coeur d'Alene have never been surveyed in a separate survey that I can find any trace of. I cannot tell which map Mr. MacCalla had before him at the time he testified to the storage here in the Lake.

I have calculated how much additional horsepower there is generated at Post Falls by reason of the Lake storage; I know what the height of the old dams was in elevation.

Preliminary Cross-examination.

(By Mr. WERNETTE.)

I do not know exactly from my own knowledge what the elevation was; those surveys, however, were made under my direction. I did not take those elevations from the surveys made prior to the time the original site was sold to the plaintiff company. I know whether or not those surveys are correct; I didn't check them up myself, other parties did under my direction. I mean the surveys from which the elevation of these dams appears were made under my direction, by my subordinates and I had charge of the surveys. If I close the memorandum I have before me I can state what the elevation of the old dams was; the elevation was 2116.5 above mean sea level.

Direct Examination.

(By Mr. GRAY.)

Those were the old dams put in in the three channels of the Spokane River by Frederick Post. They



(Testimony of C. F. Uhden.)

were not all the [514—230] same elevation. There was a variation of a maximum of 2 feet; they were spill-way dams. The dam in the North channel where the bear-trap now is, was 2116.5. Where the tainter gates now are, there was a crib dam. By my statement that there was a maximum difference of 2 feet I mean the main dams across the three channels. This where the tainter gates are was a wing dam, and that wing dam was about 6 or 7 feet above main dams. I know the elevations of the present dams. I have observed and know of the operation of the present dams and their effect upon the lake levels of Lake Coeur d'Alene since their construction. I know from records which I have received from the Government at the gaging stations, taken at Spokane and sent direct to my office what the flow of the water in the Spokane River has been since the construction of the present dams, past Post Falls, and those are shown in the water supply papers exactly; I cannot tell you what it is. These water supply papers give the record of the flow of the water at Spokane every day in the year. The storage season is 120 days a year by that is meant the time we are holding the water.

**[Testimony of A. J. Wiley, for Plaintiff (Recalled in Rebuttal).]**

A. J. WILEY was recalled in rebuttal on the part of the plaintiff and on direct examination by Mr. GRAY testified:

The average effective head at Post Falls 52 feet. It would require 3,384 cubic feet per second to pro-

(Testimony of A. J. Wiley.)

duce 15,000 horse-power at Post Falls, assuming that the low-water flow of *the as* supplemented by using the full storage capacity of the reservoir to increase the flow during the low-water period, is 2,029 second feet, the average horse-power that could be produced [515—231] would be 9,000 horse-power, that would be 58,814,640 kilowatts hours per year. Assuming that the power produced at Post Falls in 1910 was 57,127,000 kilowatt hours, I would say that the plant was being worked to about 90 per cent of its full capacity. To determine the amount of storage which the dams at Post Falls afford, I would start with the highest level to which the water could be stored, that is, in the case at Post Falls I would start with an elevation of 26.5, and then I would compare that with the average lake level in previous years, considering the lake level, the average lake level in previous years, as the actual bottom of the reservoir, a long term of years before the dam was constructed. It would be a matter of opinion as to whether you would take the average or the lowest. I take the average because the lowest only occurs once probably in a very long period of years, 20 or 30 years, and I don't think it would be proper to use that. That has only occurred once before, and it may never occur again, and I think you should use the actual average rather than the extreme low level. If the low water occurred at more frequent intervals then I think you should use the lowest year.

If you confine it to 1 year, I do not take the low-

(Testimony of A. J. Wiley.)

est for that year. I would take what the water actually was at different periods throughout the storage season and average those. You see this lake has a storage naturally without any dam in there at all. The contracted channel at the lower end of the lake does store water naturally, and we simply supplement that natural storage by means of the dams, so that I would deduct from the total storage the natural storage which occurs anyway, and take the difference, in order [516—232] to get the effect of the dams, the storage created by the dams.

Well, it would seem to me, your Honor, that the whole thing lies in the fact, the whole situation lies in the fact that this is not a new reservoir, that there is a natural reservoir there, as I said before, caused by the contraction of the water at the throat of the lake, which always has stored water in the lake, and has always been used. That water that has backed up there during the high water of the river, for instance, there is a very large discharge going through the outlet, and in order to go through the outlet, it must rise in the outlet to a higher level. That has the same effect as a dam has, to a certain extent. That draws off, as the flow of the river decreases, the level at the outlet of the lake naturally drops, and that draws off the water from the lake, so you do use the stored water naturally whether there is a dam there or not. Now, what I want to get at is what effect on the storage has the construction of these dams there, so I take as the old conditions the average elevation of the low water years, and see

(Testimony of A. J. Wiley.)

what the storage in the lake was during those years, and then I deduct that from the storage with the dams in place. The difference is the actual effective storage caused by the dams. And I might supplement that by saying the actual method of calculation, I would assume that no water was being brought off from the lake at all except the normal water, but all the stored water was being held there so that you would actually hold the water up to an elevation of 26.5 throughout the season, then I would get the difference between the level at frequent intervals so as to average it. Actually I did it for a ten days period; I took the difference between 2126.5 for a period of ten days, and the average [517—233] low water elevation of the lake for the same period, and averaged all of those, and multiplied that by the area of the lake, and I found from the data given to me that it equaled an average of 4.41 second feet, I believe it was, over the entire area of 45 square miles. It is a very complex subject, and requires considerable study. That was as near as I could get at it in the time I had.

I assume that the highest water level in the lake was 2126.5, and that a certain curve of previous lake levels as given me was correct. This is the curve.

(Document thereupon marked Plaintiff's Exhibit No. 20.)

This is Exhibit No. 20 that I testified from. I assumed that the readings on the map are correct. I could hardly say that that is the common engineering practice which I have testified to, used in deter-

(Testimony of A. J. Wiley.)

mining the storage in such a reservoir. I have never seen a condition just like this before, but to the best of my knowledge and belief it is the proper method.

Cross-examination.

(By Mr. ELDER.)

I took into consideration certain conditions in regard to the natural channel there. I testified that the capacity of the Post Falls plant was not to exceed 58,000,000 K. W. hours, from the information furnished to me by the Company as I testified. The machinery they have there, providing they got the water, could develop about 15,000 horse-power. The company has arranged in that dam for an additional unit, which would make the further capacity of about 3,000 horse-power, that would make a total capacity of 18,000. The plant [518—234] would be very much less value without storage. I don't think that the company would be able to contract taking into consideration its peak loads, a great deal more than 57,000,000 K. W. hours of electricity. I would like to explain that 57,000,000 K. W. hours represents what they actually did sell, and what the plant produced operated continuously on the average. I should think that for a short period they could run at the full capacity of the plant, that is, full generator machinery capacity, probably up to 15,000 horse-power, or probably over that for a short period. I wouldn't consider that the real capacity of the plant. It wouldn't make any difference how much machinery they had in there, the real capacity



(Testimony of A. J. Wiley.)

of the plant is the product of the machinery and the water.

If the water is there to do it, their machinery is so arranged, if the load is placed upon the plant, they can at the present time generate 15,000 horse-power, and it would for a short time any way, that is, if there was any water in the lake at all, it would generate 15,000 horse-power for a short time, but if there was less than a certain amount of water in the lake it would rapidly draw down the level of the lake, and it could not continue to develop that amount. The amount that I am assuming in that answer that the storage is the amount given to me by Mr. Gray. Mr. Gray gave me the amount of storage as sufficient to supplement the low-water flow of the river to such an extent as to produce a continuous flow during low-water period of 2,029 second feet. That is, supplementing the natural flow, the whole flow, the natural and the impounded water. [519—235]

Redirect Examination.

(By Mr. GRAY.)

I have computed the area of the lake in second feet for a period of 120 days. It is 529 second feet, that is, assuming 4.4 feet for storage, it is common practice to add at least one unit over and above what you expect to develop, to be held as a reserve in case of injury to the other units.

Recross-examination.

(By Mr. ELDER.)

According to my evidence, they have about twice

(Testimony of A. J. Wiley.)

the capacity installed; they have considerable more capacity than I think is necessary.

**[Testimony of C. L. Cory, for Plaintiff (in Rebuttal).]**

C. L. CORY was called on rebuttal by plaintiff and upon direct examination by Mr. GRAY testified:

To show the proper method to compute the storage resulting from the change in the level of the water, I have drawn this sketch, upon which B. C. represents a basin which may be used to store water supplied at least in part by two streams, one, the stream B., the other the stream C., the outlet of the lake or reservoir being at the point A. The upper sketch is supposed to represent a rough plan or map. The lower sketch is supposed to represent what we would see if we could stand and look on a level, or what is known as a cross-section, the lettering upon the lower sketch being the same as upon the upper sketch, B. and C. showing the current at which the streams B. and C. flow down here towards the reservoir or lake, C. D., and the point A., a point of elevation on which there is to be storage. The first fact which must be remembered is that the storage C. D. is a [520—236] channel for the flowing of water, just the same as the channel B. and the channel C. The water moves through the lake or reservoir toward the point A. The reason the level of the water in the reservoir or lake C. D. is more nearly uniform is because it is wide and the flow is brief. At the point A., suppose it is a natural flow over perhaps a slight rocky, rough impediment, which I will desig-

(Testimony of C. L. Cory.)

nate as M., it is perfectly evident that if there is no water whatsoever flowing over the impediment M. the level of the water in the reservoir C. D. will, if I could draw that line perfectly straight, would be all below, and as I have cross-sectioned it, just as soon as the amount of water flowing in from the streams B. and C. is greater than nothing, then the water will go over the crest of this impediment, and there will be an additional amount of water in this lake, a little higher as we come toward the source, depending upon the velocity with which it flows. I will draw that in a different kind of cross-section, the other way. I will call that O., and I will call this which would come below the natural impediment Q. That which is represented by O. is storage due to the fact that there is water coming in the streams B. and C. That which I have represented by Q. would exist if there were no water whatsoever coming in from B. and C. Now, if we modified the conditions in this storage reservoir by building a dam and raising the water up a considerable distance, 50 feet or 100 feet, or any amount, the amount of storage at any time during the year which we have added by building the dam will be represented by a straight line drawn back here, and if at any time there is water flowing over this dam or wasted, the storage will be [521—236] increased by just as much as it is put up above. Now, then, upon that explanation of the facts, in investigating the useful storage which might be put in a reservoir or lake C. D., I would attempt to find what was the level for as

(Testimony of C. L. Cory.)

many years back as I could average throughout each year, for the days that I needed storage, and I would determine as nearly as I could the level of the water going over this natural barrier at different days from the time I needed the storage, say the first of July until the first of October or November, as the case might be. If we had a very dry season, and these streams should actually go dry on the 1st of July, then everything which I could add above this line would be useful storage. If we had a very wet season and the water should come in so rapidly in the streams B. and C. as to raise the water high over this impediment in a water fall, then the storage which I would gain that year by my dam would be decidedly less, might be nothing; in other words, for a very wet year or large supply of water for that year, the storage would not be augmented in the least by the dam. For that reason we estimate storage as an average over a period. We know that in some years this may be needed, and in some other years it may not be needed; in some years it may be needed to tide over one or two or three years.

I wouldn't put in a plant of this kind, unless I could have the water practically every year, but if there were possibilities of storage the magnitude of which would be such that no water might come in at all for we will say the year 1900, and perhaps no water at all for the year 1901, if there was a possibility of building a sufficiently large reservoir to tide over those dry years with the reservoir, [522—237] you could design your plant in proportion to that.

(Testimony of C. L. Cory.)

In getting at the amount of storage needed, you would the every other year that you needed water and would leave out of calculation the years you didn't need water, because the value of stored water is absolutely and intimately connected with the time you want to use it. I would take the average of years instead of the low years, because in estimating the value of a storage, it would not be fair to say that the average of storage would be based upon one year where a large amount of water would be available, because the value of that storage, taken in that year only, would be nil. On the other hand, it would not be fair to say that this storage would have a value ascribed to the lowest possible natural flow of water in the stream. To put it in another way, it is unquestionably the proper way to estimate the usefulness of storage to base it upon a record of a number of years, rather than abnormal years. I intended to say that I would not take that abnormally low-water stage as the basis of calculation. We would take the average of those years that were so low as to require storage.

Now, it is perfectly evident that it doesn't make any difference whether this water we are getting as a result of our dam M., and which I have not cross-sectioned, and which I will designate as S., it is perfectly evident that the result of the building of the dam is not S. and O. and Q., but it is only S. It doesn't make any difference whether this stored water due to the dam rests on the rocky bottom of the lake, or whether it rests upon water which would



(Testimony of C. L. Cory.)

have been there independent of the construction of the dam. That is [523—238] the useful storage, and it can be used solely, and considered as useful if, in the operation of anything down the stream, whether it be irrigation works, power plants, water-works, or anything else, upon the basis that we can draw off the stored water S., and get every bit of it out just exactly prior to the time when these streams begin, in their normal increased flow in the fall, to make up for that. To put it in another way, if you choose, you can draw every drop of the stored water S. off in one day, if your channel is large enough. If you choose, you can draw it off so slowly that at the end of the period you would have only half of it drawn off. But the ideal condition, and one which it is perhaps quite impossible to attain, but one which you should perhaps with experience be able to approximate, would be to draw off the water beginning when you need the water and arrive at the end of the season as nearly as possible when it would be augmented. The only danger is that you might be left without water, or you might leave considerable water, and the rains come along and increase the flow. That is the proper method of computing storage where the storage is a storage through which live streams flow throughout the season. It is not the right storage if we have some place up where—suppose we have a power plant which is located here at the point X., we have a stream which will flow normally greater or less than we will call Z. We have up here a stream which we

(Testimony of C. L. Cory.)

know goes dry, but which has a torrential flow, and with the possibility of a reservoir, which I shall call R. Now, if during our storage season we can build a dam and increase the level of the reservoir R. by any [524—239] number of feet, 10, 20, or 100, the useful stored water in that reservoir is the total depth you store at the time of its average area.

Cross-examination.

(By Mr. ELDER.)

Supposing there is a fall in the river from the mouth of the storage to your plant, and you dredge out or cut out, make that lower, that does not add any further storage, for if you should dredge out at the point A., and dredge out and widen and deepen the channel, then the normal flow of these streams would eliminate the water which I have designated as Q., when there is no water flowing out, and, of course, eliminate O., which is the addition due to piling up. In other words, you would have what would correspond to a continuous stream, and not a basin.

Supposing you dredge out the mouth of the lake, make that deeper, it would allow you to store useful water, there is no doubt about that. In the operation of a plant of the kind at Post Falls, they are so arranged that automatically they use the water as the load is called for by their customers. In other words, no water is wasted, due to the fluctuation of the load. There is no other method of figuring storage than this, under these conditions, as it is the only correct method of establishing the additional

(Testimony of C. L. Cory.)

storage caused by such a dam. It is not a fact that if a dam is put in there 10 feet, that the amount stored is ten times the area of the lake. The storage will depend upon the period over which the storage is used, and if the height of the water in the reservoir without the dam varies on account of the amount of water flowing through the reservoir to any degree, in other words, that the reservoir is a reservoir naturally, [525—240] outside of the dam, we must deduct all of that water which is naturally storage in the stream between any two dates in order to get the useful storage resulting from the construction of the dam.

**[Testimony of J. C. Ralston, for Plaintiff (in Rebuttal).]**

J. C. RALSTON was called as a witness for plaintiff, in rebuttal, testified on direct examination by Mr. GRAY.

My name is J. C. Ralston; I am an engineer; have been engaged in that profession about 25 years. I took the civil engineering course of the Troy Polytechnic. I spent four years as a civil assistant in the engineering corps of the United States Army on the Missouri River work, and two years of that on Washington and Georgetown harbors, on the Potomac River, in hydraulic work and construction; thereafter a number of years as assistant engineer and division engineer for the Union Pacific Railroad at Omaha and through the west generally, including some of its various lines, and since that time I have

(Testimony of J. C. Ralston.)

been entirely in private practice in the west. I have been long acquainted with the Spokane river from Lake Coeur d'Alene to Post Falls, and have made an investigation of the throat of the lake and of the river between Post Falls and Lake Coeur d'Alene.

I know what the controlling feature in the lake level was, and in the discharge of the lake through that channel, in the Spokane River, prior to the construction of the present dams. The controlling element or feature, were the old Post dams, which were used for many years prior to the building of the Post Falls plant, that they exercised an influence upon the storage of the lake and upon the flow and discharge *influence upon the discharge* out of the Spokane River and the [526—241] outlet of the lake exercises a very profound influence upon the discharge influence upon the discharge out of the lake. And unquestionably did prior to 1907. Its greatest influence would be felt at the low water stage. The old dams control the level of the lake up to a certain elevation, that would be 2116.5, that is to say, it absolutely stopped and held water back at that level. If, however, there was a discharge into the lake and from the lake into the river and over those dams, which would raise the water, they still effect a retarding, or exercise a retarding influence upon the discharge. I think those dams were effective in raising what would otherwise have been the level of the lake; that is assuming that the water could get to the dams from the lake. That is why I said that when more water was coming in to raise it above the

(Testimony of J. C. Ralston.)

actual crest of the old dam, that it would exercise a retarding influence. That presupposes that the water gets through the throat. The water couldn't get through the throat if the lake fell down to that elevation. When the water got down to the crest of the dam, and from that below, those dams would have no effect upon the low water level of Lake Coeur d'Alene. Outside of the dams, from my knowledge and investigation, the throat of the river affected the level of the Lake Coeur d'Alene prior to the construction of the present dams.

Suppose at the time the low water, what is called the low water season, these old dams had been taken out absolutely, had been removed, the level of the lake would not then have been lowered. The average bottom of the river at the throat is from a half a foot to a foot higher than the crest of the old dams.  
[527—242]

Cross-examination.

(By Mr. WERNETTE.)

I said the bottom throat of the lake, or where the Spokane River starts from Lake Coeur d'Alene is about half a foot higher than the crest of the old Post dams. I made those measurements in June, July and August, 1910. I made them myself. The high point of the throat is approximately 2117, and the lowest 2117. It is as level as this floor. In June, 1910, the Blackwell Mill was in operation; their workings there and construction work did not affect the throat of the river in the sense of raising the level of the throat. There were slabs and other workings



(Testimony of J. C. Ralston.)

there by which the width of the channel was narrowed so that it might effect an influence in that regard, but not any influence with regard to the height, but a restricted channel in point of width.

I know of no other outlet beside the river proper from Lake Coeur d'Alene. I said the old Post Falls dams held back the water 2116.5 in low-water period, and if the water was higher than that it would retard the flow to a certain extent, as an obstruction in the river channel, and if the dams were taken out completely it would influence the discharge of the Spokane River; it would permit a more ready discharge. I know of no time when the Spokane River has run dry. The bottom of this throat, as I call it, is sand, very fine, compacted silt. The old Post dams had been in possibly 15 or 20 years prior to the time I made my measurements; those measurements were made in 1910. The old Post dam was out of existence since perhaps 1906. I know from my own knowledge what the height of the old Post dams were and from my investigation. I made a pretty complete and elaborate [528—243] survey for a similar power plant in 1900.

**[Testimony of F. E. Wonnacott, for Plaintiff (Recalled in Rebuttal—Cross-examination).]**

F. E. WONNACOTT was recalled for further cross-examination.

(By Mr. GRAY.)

I prepared a list of lands showing the agricultural lands in the county assessed at over \$150 an acre.

588 *The Washington Water Power Company vs.*  
(Testimony of F. E. Wonnacott.)

(Document thereupon marked Plaintiff's Exhibit No. 21 for identification.)

The first tract there is part of Lot 2 of the St. Maries Land Company; I think that land is across the river from St. Maries in that platted Meadowhurst, or Riverdale. I am not able to say whether it is divided into small tracts, except this small piece. It gives the number of acres as 14 acres, assessed for \$300 an acre. The next tract assessed to the Coeur d'Alene & St. Joe Transportation Company, I do not know whether that is their terminal at Harrison or not. I do not know that this is agricultural land. I haven't any means of knowing, from the records or segregating these lands, whether the list contains not only contains city property, but wharf property and sawmill sites. The property assessed to the Dryad Lumber Company in excess of \$150 an acre is land bordering the river right down where they have their booms and sawmill site; extending along the Spokane River; I don't think this is where they pile the lumber; it may include some part of the mill site.

The item, Lake Improvement Company, I do not know whether that is the Hayden Lake Hotel or not, it is land bordering on Hayden Lake, 36 acres of it. Part of it, I think quite a good deal of it, is used for agricultural [529—244] purposes. I do not know what these tracts are assessed to the Spokane & Inland Empire Railway Company; I do not know that that is their terminals. They have a large lot of valuable land, part of them agricultural.

(Testimony of F. E. Wannacott.)

This piece assessed to Mr. Kerl is on the other side of the city park, here along the water frontage. That one item is only a quarter of an acre. I told the boys to put in anything more than \$150 an acre; I told them to try and get in that list of agricultural lands. These lands are not classified on the books, because they are all patented lands, and I cannot always tell whether they are agricultural lands or not. In assessing the agricultural lands they were assessed in 40 acre Government subdivisions, and some of the lands in these forty acres might be worth \$300 an acre; there was probably five acres or ten acres of \$200 or \$300 land; there was probably ten acres of some other class, and it was all footed up and an average made; that is the way it was all done.

I cannot recall a piece of property where I did that, or give you figures on the piece of property; nearly all of the property I have included in this list is without the city limits of Coeur d'Alene; I have included a lot of other small tracts of land immediately adjoining the city limits; those are farm lands used for farm purposes.

I do not mean to say that this land of Mr. Kerl's is agricultural land; I didn't tell them to put that in either. Those little tracts in that addition to St. Maries, known as Meadowhurst, are across the river from St. Maries and are not irrigated lands either; there is not a large part of the people who live there; this includes all of the agricultural [530—245] lands. My deputies did this work, a lot of it. I

(Testimony of F. E. Wonnacott.)

don't know every individual piece of land there myself, but I have included all the lands that I think are agricultural land in here. Here is a piece here, J. J. Cuttrell, the northeast quarter of the southwest quarter of Section 18, 5 north and 3 west; it is close to Coeur d'Alene, but is agricultural land; there is 70 acres there. It is not in the city, it is outside of the city limits; there are 70 acres in there assessed at \$200 an acre and 30 acres assessed at \$275 an acre.

(List thereupon marked and received in evidence.)

**[Testimony of Jay E. Jellick, for Plaintiff (in Rebuttal).]**

JAY E. JELICK, a witness on the part of the plaintiff, on rebuttal testified as follows, upon direct examination.

(By Mr. GRAY.)

I testified in this case before. I have taken a course in the profession of engineer and draftsman, and I followed that practice for a number of years. I am now in the employ of the Washington Water Power Company.

It was stipulated in open court that Andrew Bloom and Mr. Campbell, if present, would testify that they had taken readings on a gauge established at the works of the St. Joe Boom Company, at or near the mouth of the St. Joe river commencing in the month of April 26th, 1903, and extending down to date; and that the readings are as shown in the two books which are produced here, and which I will not offer in evidence. Counsel for the defendant did not

(Testimony of Jay E. Jellick.)

admit as to the correctness of the readings, but admitted that said witnesses would testify as to the readings as shown by said books. [531—246]

(Witness continued:) I have made a curve or set of curves showing the elevations of the water as disclosed by the readings of Mr. Bloom and Mr. Campbell at the St. Joe Boom Company's works, and as shown by the two books which I had in my hand.

(Thereupon plat was marked Plaintiff's Exhibit No. 22.)

That plat was prepared by me, it clearly shows the elevations of the water on the various days in 1911. The curve has been corrected because the gauge has raised a foot. The curve is nothing more or less than a practical representation of the elevations of the lake at the St. Joe Boom Company's place, the sorting gap, near Chatecollett, and represents the elevations of the lake on every day of the year for the years 1903 to date inclusive, that is, from April 26, 1903, to date. The notations on the bottom represent the months and days of the year, and the figures on the side represent the elevations of the lake according to the U. S. Geological Survey. The 0, 1, 2, 3, 4, 5, 6, 7, etc., on the left-hand side represent the gauge of the St. Joe Boom Company, which is an arbitrary gauge, reading in inches, and the figures from 2119 to 2133 represent the elevations according to the geological survey. The key is shown here for each of the years. In 1910 it seems there were no readings taken in January, February and



(Testimony of Jay E. Jellick.)

March, on account of the lake being frozen over for that period of time. I have platted day by day the elevation of the water, as shown by the readings of the St. Joe Boom Company up till March, 1911, when it is shown that the gauge had been moved, had been taken off to [532—247] be repaired, and replaced wrongly. I made a correction of one foot up until our gauge was established there in October, 1911. I have checked the readings of the St. Joe Boom Company gauge and other readings at Coeur d'Alene City, at Johnson's boat-house, and other places where there are gauges. The readings at Coeur d'Alene City practically agree with readings taken at the St. Joe Boom Company's works, all through.

(Plaintiff's Exhibit No. 22 was then offered and received in evidence.)

Cross-examination by Mr. ELDER.

(Witness continued.) The gauge was originally established by the St. Jose Boom Company, and, as I stated, was merely an arbitrary gauge; by that I mean that it was a rod or something of that kind, and graduated into feet and inches, and nailed to a pile, and later on it was tied in by different surveyors to the bench mark here in Coeur d'Alene City. By that, I mean that the elevation of the lake was taken at a certain day, and noted by this arbitrary gauge of the St. Joe Boom Company, when the lake, of course, was level, some time in the summer when there was no high water of any kind. There is practically no difference at low water between the end of the lake and at Chatcolet; in September there isn't

(Testimony of Jay E. Jellick.)

any. I couldn't say whether there was any difference at Chatcolet and at the throat of the Spokane River at the bridge at the mouth of the river, because we have no gauge established there. But I would say that I don't believe there is any difference. I made that map wholly from the gauge measurements as taken at St. Joe by the St. Joe Boom [533—248] Company and our company.

(Thereupon water supply paper No. 38 was offered and received in evidence.)

Mr. GRAY.—That is the table in 1899, on page 367 of water supply paper No. 38. Elevation of water of Lake Coeur d'Alene 1899, May 20, 2130.645; May 23d, 2130; July 3d, 2128.242; July 24th, 2123.643; August 5th, five P. M. 2122.551; August 23d, 2121.469.

(Examination by Mr. GRAY.)

I have prepared the elevations of Lake Coeur d'Alene for every fifteen days as shown by the readings of the lake which has been introduced, and the elevations of the water of Lake Coeur d'Alene taken at the St. Joe Boom Works as shown in the books. That paper or table correctly represents those in tabulated form.

(The tabulated sheet was thereupon marked Plaintiff's Exhibit 24, 24, 26, 27, 28 and 29, which were thereupon offered and received in evidence.)

(Witness continued:) From the water supply papers which have been introduced, I have prepared a curve showing the flow of the Spokane River graphically at Spokane, with the rating curves of the

(Testimony of Jay E. Jellick.)

Geographical Survey shown thereon, and the dates as are in the other curves; they are shown on the bottom of the exhibit, and the flow in cubic second-feet on the left-hand side and the key also, and all geological data. That is correctly prepared from the water supply papers, which have been introduced in evidence.

(Thereupon said plat was marked Plaintiff's Exhibit No. 31, 32, 33, 34, 35 and 36, which were offered and received in evidence.) [534—249]

(Witness continued:) From the water supply papers which have been introduced in evidence, they correctly show the flow and were prepared by myself. From the flow of the river at Spokane I have determined what the elevation of Lake Coeur d'Alene was during the years 1891 to 1902, inclusive. I might say that we have readings of Coeur d'Alene Lake from April 26th, 1903, as shown by one of those curves, up to date, and we also have the discharge of the Spokane River at Spokane during that same period, and we have compared the two, we compared the discharge on a certain day with the elevation of the lake at Coeur d'Alene on the day before, allowing the water a day's time to reach Spokane from Coeur d'Alene Lake, and we have discovered that according to certain elevations of Coeur d'Alene Lake there is a certain discharge of the Spokane River at Spokane, within a reasonable degree of accuracy. That was prior to the construction of the present dam, and prior to the changed condition. There are three different curves used, that is, a rising lake, when the

(Testimony of Jay E. Jellick.)

water is rising in the lake the discharge will be different than when the lake is falling, as well as when the lake is stationary, so that it necessitates taking three different curves, a rising lake, a falling lake, and a stationary lake, to obtain the elevations of Coeur d'Alene Lake prior to 1903. We actually have gauge heights and discharges of the Spokane River from 1891 up to 1903, as well as from 1903 on, and from those discharges of the Spokane River we have been able to derive curves of the elevation of Coeur d'Alene Lake prior to 1903. I have prepared those curves showing the elevations.

(Whereupon plat was marked Plaintiff's Exhibit No. 37 and was offered and received in evidence.)  
[535—250]

Those curves correctly show by my derived table in the manner in which I have stated, the elevations of the Lake from 1891, April 1st, to April 26th, 1903. I have correctly platted them according to that method upon this Exhibit No. 37, under Mr. MacCalla's direction. From the various curves which I have testified to, I have prepared a composit or average curve, showing the average elevation of the lake on each day from 1891 to 1904, inclusive, and another curve showing the average elevation of the lake on each day since 1907 up to 1911, inclusive.

(Map was thereupon marked Plaintiff's Exhibit No. 38 and received in evidence.)

WITNESS.—That is accurately prepared.

(Testimony of Jay E. Jellick.)

Cross-examination.

(By Mr. ELDER.)

Some of those curves have nothing to do with the St. Joe Boom Company readings; those that do were prepared from the information given by the St. Joe Boom Company, and the company's elevations as taken by themselves. I made those curves myself. I might state that there were practically no computations. The Geological Survey have published the gauge heights in the Spokane River in these different water supply papers that have been introduced, and in some cases they actually published the discharge, but where they do not publish the discharge they publish what is called a rating curve, and that rating curve for different gauge heights is merely a matter of plotting a curve according to their data, and reading off the discharge. What I did was simply a matter of draftsmanship, was simply to take the readings as given to you and draft them on these plats. On that average curve I computed the average height of the water myself. [536—251] I didn't get an opportunity to state that they were taken every ten days. Each heavy line here represents ten days. I didn't take the intervening period, because it would be a little more laborious, and probably would not give any more accurately the water. I made those computations myself.



**[Testimony of Frank H. Feller, for Plaintiff (in Rebuttal).]**

FRANK H. FELLER, a witness called and sworn on behalf of the plaintiff on direct examination by Mr. GRAY, testified:

I took the datum of the St. Joe Boom Company gauge in the elevation above sea level, as determined by the Geological Survey of Lake Coeur d'Alene.

Whereupon it was conceded that the U. S. Geological Survey datum has been properly shown upon the exhibit.

**[Testimony of C. S. MacCalla, for Plaintiff (in Rebuttal).]**

C. S. MacCALLA was called as a witness on the part of the plaintiff on rebuttal and on direct examination by Mr. GRAY:

My name is C. S. MacCalla. I am electrical and hydraulic engineer. I was educated at Lehi University from the engineering course; graduated in 1896, and have had about sixteen years' experience in various parts of the country, New York, Schenectady, Sidney, Australia, and in this section of the country. I have, during the course of my experience, had to do with the development of hydro-electric plants. I have been out here now a little over nine years. I came out primarily to take charge of the development of the Post Falls plant, and have been connected with the Washington Water Power Company ever since the year 1903. I had charge of the construction of that plant. I am now general manager of the company. I was somewhat familiar with the

(Testimony of C. S. MacCalla.)

Lake Coeur d'Alene [537—252] prior to the time the present dam and plant of the company were put in, and have remained familiar with it ever since.

Referring to the curves showing lake elevations derived from the flow of the Spokane River at Spokane, I will explain how that information is procured—if we have the known lake elevations for a certain year, with its corresponding flow in the Spokane River for the same year, we can ascertain approximately the lake levels for another year in which the lake levels have not been recorded, if we know the river flow. For instance, take it at a time when the lake, say, is stationary, we take the river flow at that time; now, if the conditions are approximately the same, we can take the known flow for another year and obtain the corresponding lake level. We have plotted three different conditions there, first, with the rising lake level, with a falling lake level, and with the lake at a stationary position, and we have checked these computed curves with known curves, and we find that they agree very closely.

That is common engineering practice in all hydraulic work, and it is particularly accurate with a lake such as Lake Coeur d'Alene, which is a very deep lake, and with jagged bodies of land along its shores; it is a lake not materially affected by wind.

Prior to the construction of the dams at Post Falls there were other dams in the river at that place, and prior to the construction of these present dams I determined the amount of power that could be generated at Post Falls without raising the dams above

(Testimony of C. S. MacCalla.)

their then level. We have operated that plant for about six years, and have determined [538—253] from the operation how much power can be developed on an average during a season at Post Falls; at high water, of course, very much more power can be developed in any spring than during the low-water season. It would not be feasible to develop the plant for high water flow, on account of the demands for power throughout the year being fairly continuous. Lake Coeur d'Alene and the Spokane River are very materially subject to changes in the amount of flow, occasioned by natural causes. Our Government records show that the flow varies from some 1200 second-feet up to thirty or forty thousand second-feet. My attention was called to the following testimony, given in the spring of 1910 in the case of Washington Water Power Company against Waters:

“Q. How much power with the present dam you have constructed at Post Falls that you are now maintaining, do you develop, with the storage reservoir which you have—which you are using, by the maintenance of the present dam?

“A. With six and a half feet of storage which the design of the bear-trap will permit storing in the lake, we can develop at Post Falls about 11,900 horse-power.

“Q. 11,900?      A. 11,000.

“Q. During high water?

“A. We have installed about 15,000 horse-power.

“Q. More than water enough to supply it during that period of time?      A. Yes.

(Testimony of C. S. MacCalla.)

“Q. Without that storage, what horse-power—average horse-power, at low water, could develop—at average low water, I mean during those low-water months? [539—254]

“A. Our low water flow at Post Falls would permit us to develop about 5650 horse-power.

“Q. You say that would permit you to develop that? A. Without any storage, yes.

“Q. That is a gain of how much?

“A. That is a gain of about 90 per cent, the difference between 5650 and 11,900.

“Q. That would be over 100 per cent, would it not?

“A. No, sir; 11,900 is about 90 per cent more than 5650, I think. Yes, I am in error; the low-water flow is—low water 6250 horse-power. With storage, six and a half feet, we get 11,900, a gain of 5650 horse-power, about 90 per cent.”

We had been operating at that time for three low-water seasons. We are able to develop at Post Falls during the low-water season since 1907, about 11,000 horse-power. We find by actual operation of the plant that about 11,000 horse-power is the maximum power that we can get out of the plant during the low-water season, which averages about four months. It varies, of course, to some extent from year to year, depending on the natural flow of the river; a very low year would be less than a very high year. Theoretically, 11,900 horse-power is the amount of power we ought to be able to develop at that plant; actually we find in practice that we cannot get that much out of the plant under average conditions.

(Testimony of C. S. MacCalla.)

The reason for that is very clear. We are unable to actually draw out all of the storage, and for the further reason because we never can tell just at season in the fall of the year the rains will come and the natural [540—255] flow will increase, and we would be unable to let the entire flow out, for instance, say, the 1st of October, if the rains didn't come when they usually do, they might be somewhat delayed. For instance, certain years the low-water flow has extended into February, whereas, as an average, it is usually about the middle of October or early in November.

I testified in the Waters case that under old conditions you could develop 6250 horse-power, at low water. That would give us an additional horse-power by reason of the storage of 4750. The only difference I desire to make in the figures I gave at that time is that. I would say that the figures given by theoretical calculation and actual practice are very close. The average low flow of water for low years was 1200 second-feet. All of this additional horse-power is not the result of artificial storage by reason of the construction of the present dam. There is a certain natural storage in the lake which would come out in any event; the gates control that to some extent and add to it. It is correct, as has been testified to here, that there are installed in the plant at Post Falls five units of 3000 horse-power each; 3260 second-feet is the maximum capacity of the wheels, which is in excess of the generator capacity. In all appliances we have to have a spare unit in case of a



(Testimony of C. S. MacCalla.)

breakdown; we install one additional unit as a spare capacity, and, as it figures out, we have a trifle over the capacity of one unit to spare. Four units would be about 12,000 horse-power.

In designing the dam in 1904 we left an additional opening just on general principles. It added practically nothing to the expense. -It might be desirable to install [541—256] an additional spare unit, if experience with these units would warrant it. We never have done so because we believe that it was unwarranted. The natural minimum level of the lake is approximately 2120 feet above sea level. The works at Post Falls would hold the water at 2126.5, a total of 6½ feet. That, of course, includes a certain amount of natural storage which is in the lake in any event. The lake acts, of course, as a natural reservoir, which equalizes the flow of the river to a certain extent, but without the controlling works, of course, that storage cannot be used later on in the low-water season. Now, as a matter of fact, as I explained before, we don't draw out all of that 6½ feet on account of operating reasons. Those falls referred to in my testimony in the Waters case in regard to the company preparing plans for the development of the water falls in Spokane have not ever been developed; they are not in the course of development. In explaining, my testimony given in the Water is as follows:

“Q. What horse-power did you have before that?

“A. With the total fall developed without the lake storage we will have 21,300 horse-power.

(Testimony of C. S. MacCalla.)

“Q. That is with the gain?

“A. No, this is without the lake storage, 21,300.

“The COURT.—Is that the present capacity at Spokane?

“A. No, sir; that is with the upper fall developed. With the storage we will get 33,400 horse-power, giving a gain of 12,100. The cost of development would be very nearly the same. There would be a slight difference, a little bit on the machinery. The actual machinery in the [542—257] plant is relatively small part of the total cost of development.

“Mr. KERNS.—In other words, by holding the water of Lake Coeur d’Alene and the reservoir basin you increase the power of your Spokane plant from 21,300 to 33,400 horse-power?

“A. That is it exactly. We contemplate to put in there four 7,500 kilowatt generators, 30,000 kilowatt, or total of 40,000 electrical horse-power.

“Q. Is it not a fact that the Washington Water Power Company has another dam for the generation of power in Spokane, below the Spokane dam?

“A. This one in process of construction, yes.

“Q. How long has that been in process of construction?

“A. Nearly two years.

“Q. How near is it to completion?

“A. We hope to have part of it—the first part of it running in the neighborhood of next October or November, somewhere along there.

“Q. That new dam can be added to as the demand for electric power continues to grow?

(Testimony of C. S. MacCalla.)

“A. Unfortunately, the entire dam has got to be put in the first time; in other words, the entire investment has got to be made as far as dams and buildings go.

“Q. You can add to your units in that dam the same as you add to them at Post Falls?

“A. Yes, the buildings will hold the units. The lake flowage there will give us a gain of about 5,400 horse-power.

“Q. Without lake storage, how much power could [543—258] you generate in that new dam?

“Q. Without lake storage we can generate in the neighborhood of 13,600.

“Q. With the lake storage, how much?

“A. About 19,000. The same storage affects the city of Spokane; it has a pumping plant for water supply; also affects any power site on the river.

“Q. Affects it; it is a benefit?

“A. It benefits it, yes; benefits the city about 67 per cent.”

Have you any explanation to make of that testimony, Mr. MacCalla? If so, just make it.

I say, in Spokane, of course, the plant then under discussion has not been developed, and is not now under development. The present plant benefits to a certain extent by the storage, but not nearly to the theoretical extent, for the reason that we have no local storage capacity in Spokane. Now our maximum load on our system occurs in the afternoon and early evening, which is the time that the Post Falls plant has the maximum load, corresponding with the sys-

(Testimony of C. S. MacCalla.)

tem maximum. It takes about eight hours for that water to get down to Spokane. The result is that the maximum flow due to the maximum load at Post Falls reaches Spokane in the morning hours, at three or four or five o'clock in the morning, which, unfortunately, is the time of our minimum load, and we are unable to utilize it. In other words, water at that time is always wasted, even in the low-water season, under the present construction. So that that increased flow, by reason of the peak load at Post Falls, isn't utilized at Spokane. [544—259]

At Little Falls we get a certain amount of gain from it, although the same conditions exist down there, but to a less extent. We there have a little bit of local storage; in other words, we can draw the water level down a few feet below the dam; but that storage doesn't amount to much on the actual conditions of operation; it does help a little bit. The theoretical amount would be somewhat greater than I testified before. Since that time, and before the completion of the plant, we added a few feet to the top of the dam. Theoretically it would increase our power at Little Falls if the water could be utilized in the same manner that it is utilized at Post Falls. Theoretically the gain at Little Falls would be about 5650 horse-power. Now we cannot get that on account of the water down there at the wrong time, that is, at the time the maximum flow in the river arrives at Post Falls, this time does not coincide with the maximum load which it is necessary for the station to carry.

(Testimony of C. S. MacCalla.)

The usefulness and benefits from the storage here depend upon the ability to store it above the plants further down the river. The theoretical benefit there, assuming that we could use all the water would be 2650. We cannot get anything like that on account of it being impossible to have any local storage. Any local storage would flood the city, which, of course, is out of the question.

In the figures which I gave showing the increased power at Spokane, that included the development of the upper falls, which we were then working on. The actual amounts we gain at Little Falls by reason of this lake storage is difficult to [545—260] state, but I think, in a general way, it would be 80 or 90 per cent of the 5650 horse-power. That is occasioned largely by having storage there. It takes about 28 hours after the water leaves Post Falls for it to get to Little Falls; that time varies with the different stages of the river. Our company is developing a plant away down the Spokane River, that is not completed. We don't expect to have that completed for three years.

Cross-examination.

(By Mr. ELDER.)

The power that is generated at Post Falls is delivered in various parts of Idaho. The statement which you read from the water-gauge, "We furnished from our plant at Post Falls a maximum of 11,000 horse-power at one time to the mines in Shoshone County, in 1909," sounds about right; I think that is true; it is my recollection that that was in



(Testimony of C. S. MacCalla.)

March, we were undoubtedly furnishing the power to the Coeur d'Alene railroad, somewhere in the neighborhood of 1,300 horse-power, that is my recollection. We furnished power to Coeur d'Alene City, a small amount; I couldn't answer from memory how much power we furnished to Coeur d'Alene City, Rathdrum and Post Falls during this same time.

The maximum amount of power we can develop at Post Falls during the low water season is 11,000 horse-power. Of course, at other times of the year the amount is limited by the machinery installed. We can generate about 15,000 horse-power when there is sufficient water in the river; at times we have generated that amount; there are, of course, other times that the deficiency has to be made up from power generated at other plants, and we do that frequently, supplementing the capacity from Post Falls with the power from [546—261] other plants, to furnish the Idaho load. The power to the Inland Empire Company to the Coeur d'Alene Division is distributed from the Post Falls plant, it may not necessarily be generated there. Our plants are tied together so that we can draw on any plant for electricity needed, under certain conditions; that is not strictly correct, although under certain conditions it is. In emergency conditions we could do that. Of course, the natural and proper way to supply it is to furnish the power from the nearest plant, in order to give the best service. During the summer season, the low-water season, we have to supplement the power from Post Falls by power from one of our

(Testimony of C. S. MacCalla.)

other plants. In the high water season we supply the Idaho load direct from Post Falls. In that case we do not have the system tied together.

We generated 6,250 horse-power with 1,200 second-feet. That was a little bit more than the minimum flow before the dam was put in. It is an average of the low years. The 6,250 would be a fair average of the minimum amount developed before the dams were put in. I think that was about the minimum flow with the exceptions of two occasions that I remember of, caused by an artificial condition, a log jam in the lake during extreme low water, which, of course, wouldn't occur again, so it wouldn't be fair to take the extreme low water. The extreme low water was about 1,020 feet. The gain with our flowage rights above the dams, above the previous condition is about 660 odd second-feet. The low-water flow is the determining feature in determining the amount of power or the flowage, but that would not be proper to take the low-water flow, which you know is caused by a conditions which would not recur again, so therefore in [547—262] figuring the low-water flow and determining the amount of power developed at Post Falls, any good engineer would naturally neglect such a condition as a log jam caused there during old conditions, which couldn't occur again. The statement that the lowest water at Post Falls prior to the time of the putting in of your dam was 1,020 feet, caused by a log jam is correct. I think that existed twice about a month apart; that is my recollection, it was either in 1905

(Testimony of C. S. MacCalla.)

or 1906. The first time was either the last of August or the first of September, and the second time was about a month later. I can give very closely from the records, the low-water flow at Post Falls during September, 1904; the curves show about 1,400 second-feet at Spokane which corresponds to about 1,200 at Post Falls. I think 1905 was the lowest water on record. Of course, as I stated, the extreme minimum conditions referred to, of flow, would not bear any particular relation to the lake elevation at that time. The low-water flow those two periods was caused by a log jam at the outlet of the lake which temporarily shut off the flow of water out of the lake without materially affecting the lake level, that is, it didn't last long enough to raise the lake materially. We consider though that about 1,200 second-feet is the low-water flow of the Spokane River, natural flow.

You understand that this upper plant at Spokane has not been developed, and is not under development, but the principal expense there would be the construction of the tunnel, about 2,000 feet, and the installing of the controlling works, and those elements would not be affected [548—263] by the additional flow. The additional flow would not require any larger tunnel and gates; it would require an additional investment in generating apparatus.

We have one water-power plant in Spokane; it is in the vicinity of Monroe Street and the river. We have no plant in course of development at Post Street; we have a substation there; no power is gen-

(Testimony of C. S. MacCalla.)

erated there; it is purely a distributing station. The power is generated at the Monroe Street station. I couldn't say offhand how much of that has been built since 1907. I have been there all of the time, but I don't recall just how much has been spent. I have had charge of the work; I could get that information for you, if it is necessary, but I couldn't give it offhand. The additions to the plant at Post Street substation would depend, of course, on the increase of local business; the power from our various plants is taken into the Post Street, and distributed for use in the city.

The theoretical amount of power which can be developed in Spokane more than could be prior to the construction of the present dam, is 2,650 horsepower, actually it is somewhat less than that. The Spokane plant is about 8,200 horse-power; that is the generating capacity. Unfortunately, it isn't a fact that we can shift our maximum load so as to use the water from this lake here, from our storage to our different plants, and in that way take advantage of it. We can do it to a certain extent, but it doesn't materially affect it, owing to the high load factor of our load system, the load factor being the ratio of the average load to the minimum load.

#### Redirect Examination.

(By Mr. GRAY.) [549—264].

We have since the construction of the present plant at Post Falls used it as fully and as efficiently for the development and generation of power as we could, and if it had been owned separately and apart

(Testimony of C. S. MacCalla.)

from any other plant; and we have operated more effectively than if it were a separate plant, owing to our ability to supplement the power from other plants during the low-water season.

Recross-examination.

(By Mr. ELDER.)

I stated we have another plant under construction at the present time at Long Lake. Long Lake is about between 25 and 30 miles west from Spokane. It is the name that has been given to a water power developed on the Spokane River; it is about  $4\frac{1}{2}$  miles from Little Falls. The additional flow during the low-water season flows down the Spokane River and is available to some extent to any power site or any plant, developed or undeveloped, which may be on the river. The ratio of increase in power that this lake will add to the Long Lake plant will be that of 661 to 1,861. When we figure that the increase storage amounts to about 661 feet, and that superimposed upon the natural low-water flow, assuming that we could use it all. We don't know as a matter of fact that we can use it all. This reservoir would not affect the efficiency of our plant at Long Lake during the low-water season. In percentage this reservoir will increase the efficiency of our plant at Long Lake about 30 per cent, assuming that we can use it all.

Redirect Examination.

(By Mr. GRAY.)

I mean by "Assuming that we can use it all," assuming that we don't lose the water, as we do at Spo-



(Testimony of C. S. MacCalla.)

kane; that use [550—265] depends upon having storage above that plant, and at Little Falls it depends upon having storage there.

Recross-examination.

(By Mr. ELDER.)

In regard to Spokane and Little Falls, the necessity for local storage was not so prominently brought to our attention as it has been in the last few years, when the necessity for economizing on the water has been increased. At the time I testified in the Waters case we had operated here 3 years, and our plant at Spokane some time longer than that.

**[Testimony of Frank H. Feller, for Defendants (in Rebuttal).]**

FRANK H. FELLER was called as a witness on the part of defendant on rebuttal and testified as follows on direct examination by Mr. BLACK:

I have no position with the plaintiff company; I have had no position with that company; I have been employed by the Washington Water Power Company in the last four or five years at different times, doing surveying on Lake Coeur d'Alene and the Spokane River, and the ranches up on these rivers. I am not sure that I testified for them in all the cases that have been presented to the Court regarding the overflowage of lands; I know I have been in a good many; I remember taking some elevations at the throat of the Spokane River at the bridge which crosses to the Blackwell Mill, also continuing on down the river to the railroad bridge. I took elevations

(Testimony of Frank H. Feller.)

of the lake just outside of the source of the river on the same day or about the same time that I took the elevation at the first bridge. I haven't my notes with me, but I think that was in November [551—266] or December, 1910; I couldn't tell what the difference in elevation of water at that time was. I think it was about two-tenths difference at the wagon bridge, and about a foot difference down at the railroad bridge; that railroad bridge is down about a mile, at La Crosse. I think the first bridge, the Blackwell bridge must be perhaps six or eight hundred feet from the source of the river; I wouldn't want to be positive that on the same day there was a difference in elevation at the lake and down at this bridge of two-tenths of a foot, that would be about  $2\frac{1}{2}$  inches. The water, I think, at that time would be possibly falling; I don't remember of taking measurements on September 16th of any year. I should think there would be a rise and fall of the water from the lake down to the first bridge, and a difference in August and September when the lake is practically at a stand still, in that six or eight hundred feet. Since 1907 the water at the bridge would be practically the same elevation that it is in the lake at the outlet, in September.

I have to assume from the testimony that the elevation of the old dam—the crest of the old dam was at an elevation of 16; there might be perhaps a foot of water running over the dam, a foot and a half, which would make several feet fall from the lake to the dams; there might be a majority of that fall con-

(Testimony of Frank H. Feller.)

sumed at the outlet of the lake. It would be possible that there had been a foot difference near that; I think the water is very shallow in September of any year, it is a very shallow part of the river. I do not know how deep the water now is since the dam has been [552—267] in operation, in September, between those points, I do not know approximately. I admit that since the operation of the dam the water would be deeper there than it was before with the old dam. I never have taken any measurements there in September and don't know whether there is any difference in the elevation of the water at the bridge and at the mouth of the lake, in any years since the dam was constructed.

**[Testimony of C. S. MacCalla, for Defendants  
(Recalled in Rebuttal—Cross-examination).]**

C. S. MacCALLA was recalled and testified on cross-examination by Mr. ELDER:

In testifying in regard to the low-water flow at Post Falls, we have never had any measurements at Post Falls, we determined it from the best evidence that we could get, as to the difference in flow between the flow at Spokane, as shown by the Government gauge, and the flow at Post Falls, and the best figures we could get on it was about 200 second-feet less than low-water at Post Falls. My evidence was based on the best investigation, the best evidence we could get as to what that difference was; it was approximate. At that time we made no measurements at Post Falls.

Thereupon defendant offered in evidence measurement of the water of the Spokane River for the year

(Testimony of C. S. MacCalla.)

1904 on September 16th at Green Acres, as follows:

“Width 254 feet; area of section 1,181 feet; mean velocity feet per second .62; discharge 727.”

Thereupon the following exhibit was offered in evidence by defendant:

“September 16th, Spokane River Old Fort Sherman, at the [553—268] outlet of Coeur d’Alene Lake, width, 450; area of section 1,043 feet; feet per second, mean velocity, .93; gauge height 2,119; discharge 1909.”

The receipt in evidence of this exhibit was objected to by plaintiff, objection sustained, and the Court stated that he would let it go in the record for use by the Appellate Court.

C. S. MacCALLA was recalled and upon direct examination by Mr. GRAY:

There is a natural waterfall at Post Falls; there is a granite reef or ledge which runs across the country at Post Falls that deflects the water to the surface; a salt reef running across the valley. I have made observations below Post Falls and above Spokane Falls to ascertain whether or not the water which passes over Post Falls remains in the channel of the Spokane River, or departs into the surface around on the sides. One night, just for the purpose of ascertaining that, we shut down our plant, and the flow of the river was very materially reduced, and at a point somewhere near Green Acres, below Green Acres, the river bed practically dried up. The sound of running water was very evident, and distinctly heard underground, under the rocks, but on

(Testimony of C. S. MacCalla.)

the surface the river was practically dry. A study of the geology of the valley shows very clearly that the water, after passing over the granite reef at Post Falls, more or less of it disappears and flows underground. We observed this first in the construction of our plant at Post Falls where he had two of the channels of [554—269] the river coffer-dammed off where we were building the power station. We had three coffer-dams, two in the upstream, in the two channels, the south and the middle channel, and one downstream, where these two channels come together, and there was a certain amount of leakage, of course, through these dams, in fact through the lower coffer-dam there was a steady stream, a considerable stream of water leaking around through the gravel and underneath and around the edges. We installed a pumping plant there to pump this out. We never ran that after we once got the river bed pumped out, although the stream continued to flow for perhaps 100 feet, with the water standing outside of the coffer dam to a depth of six or eight feet; and this stream disappeared; apparently there was some underground channel. Then the character of that soil is sand and gravel. We arrived at a 200 feet difference, or at least we checked that, by the manipulation of our wheels at Post Falls. For instance we bought those wheels—or we made tests of service on those wheels to determine the difference between wheels that the two different makers have, and in making these efficiency tests we can reverse the operation until, having gotten the efficiency for



(Testimony of C. S. MacCalla.)

certain loads we can use the waterwheels as an actual water meter, and tests made at this time confirmed our calculations of approximately 200 feet in low water season difference in flow between Post Falls and Spokane.

The water that flows out into the country below the Post Falls dam gets back into the river in the vicinity of Spokane, above the granite ledge. I knew where the pumping [555—270] plant of that city is. I think part of that water gets in even below that pumping plant.

We had a very material evidence along that score at the time we were constructing our steam power station, which is below the city pumping plant, in the city limits of Spokane, and above the falls. We were excavating there for tunnels to get our condensing water into the tunnel from the river. The Stead power station is situated just across the street on the river bank, the street intervening between the plant and the river, and the water level in this excavation cut off from the river was materially lower than the level in the river; the water ran through and seeped into the hole without filling it up, although the water level in the hole was below the water level in the river.

The city of Spokane gets its water supply from the underground flow in the vicinity of the pumping station. It comes from wells, not from the river; those wells are several 100 feet away, I should say.

(Testimony of C. S. MacCalla.)

Cross-examination.

(By Mr. ELDER.)

They don't get any of it from the river—this water is of an entirely different character from the water in the river, not the same kind of water at all. The water in flowing through the gravel, picks up, of course, a lot of mineral salts, the lime salts, magnesia, from the underground flow. It is correct that although we were constructing a very valuable plant at Post Falls we never made any measurements of the quantity of water. [556—271]

*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-Officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

IT IS HEREBY CERTIFIED that the foregoing transcript is a full, true and complete transcript of the testimony and proceedings had upon the trial of the above-entitled action, and that the said transcript contains all of the evidence and all of the proceedings had upon the trial of said action, and

may be settled and approved by the Judge of the above-entitled court.

JOHN P. GRAY,  
Attorney for Plaintiff.  
ROBERT H. ELDER,  
N. D. WERNETTE,  
Attorneys for Defendants. [557]

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[Certificate of Dietrich, D. J., Re Transcript of  
Testimony etc.]

*In the District Court of the United States for the  
District of Idaho, Northern Division.*

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and FRED E. WONNACOTT, as Assessor  
and Ex-Officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

United States of America,  
District of Idaho,—ss.

The undersigned Judge of the District Court of the United States for the District of Idaho, Northern Division, being the Judge who tried the above-entitled action, does hereby certify that the foregoing statement contains, in substance, all of the evidence introduced upon the trial of said action (except the exhibits introduced on the trial thereof

to be separately certified by the clerk of said court, and by him transmitted to the United States Circuit Court of Appeals for the Ninth Circuit), and also contains, in substance, all of the proceedings had on the trial of said action and the same is hereby approved and allowed and is deemed adequate to present for review any ruling appearing thereon to have been excepted to by or deemed excepted to on appeal.

July 26, 1913,

FRANK S. DIETRICH,  
District Judge.

[Endorsed]: Filed July 28, 1913. A. L. Richardson, Clerk. [558]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

THE WASHINGTON WATER POWER COMPANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-Officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Opinion.**

Feb. 24, 1913.

JOHN P. GRAY and FRANK T. POST, Attorneys  
for Plaintiff,

N. D. WERNETTE and ROBT. H. ELDER, Attor-  
neys for Defendants.

DIETRICH, District Judge:

The plaintiff, with headquarters at Spokane, Washington, is engaged in the business of developing and distributing electrical energy for power and lighting purposes in Eastern Washington and Northern Idaho. One of its power plants is at Post Falls, within the defendant county, and it brings this suit to enjoin the collection of the taxes (in part) levied upon this plant for the year 1911.

The gist of its complaint is that the assessment is both unequal and excessive. The bill contains averments of the existence of other conditions essential to the jurisdiction of federal courts to grant relief against the enforcement of [559] state taxes, but they are all incidental to the fundamental proposition of an over-valuation. It is familiar law that where it is sought to enjoin the collection of a tax for the reason alone that it is excessive it is not sufficient to aver merely an over-valuation, but it must further appear that the over-valuation was fraudulently or intentionally made, or was the result of the adoption of an illegal system or mode of valuation necessarily resulting in a discrimination prejudicial to the plaintiff. It is sometimes said that courts will grant relief in cases where the



valuation is grossly in excess of the taxable value, but this is only another way of stating that the over-valuation must be the result of fraud; a malicious or fraudulent intent may be inferred from a grossly excessive valuation, or from the recklessness upon the part of the assessing officers implying a willingness to do the taxpayer an injustice. 37 Cyc. 1263. *Chicago etc. R. Co. vs. Babcock*, 204 U. S. 585.

Apparently there is no substantial controversy between the parties touching these controlling principles of law, and the real issues are of fact only. In brief, the bill sets forth not only that the plaintiff's property was grossly overvalued, but that the county officers charged with the duty of making assessments and equalizing the same in Kootenai County, knowingly, wilfully, and systematically valued property other than the plaintiff's at from thirty to sixty per cent of its actual value, while assessing that of the plaintiff at more than twice its actual value. These officers, it is represented, not only acted recklessly, but deliberately declined to investigate the facts touching the value of plaintiff's property, and were influenced by a local feeling of hostility toward plaintiff; it is further alleged that one of the members of the county board of equalization was actuated by a personal feeling of malice or ill will. Complaint is also made that while the plaintiff's [560] property is an indivisible unit, it was assessed in separate parcels. The assessments as established by the county officers were substantially as follows.

On page 11, Book 1 of Deeds, situate in Sec. 3 and 4, Twp. 50, Range 5; and on pages 412 and 413, Book "U" of Deeds, in Sec. 4, Twp. 50, R. 5 .....	\$1,080,000.00
On pages 460, 461, 462, 463, 464 and 465, Book 9 of Deeds, in Sec. 3, Twp. 50, Range 5 .....	75,000.00
On page 97, Book 34 of Deeds, Grist- mill in Sec. 3, Twp. 50, Range 5	40,000.00
Bear-trap dam and small dam at Post Falls .....	562,500.00
Building and excavation, Sec. 4, Twp. 50, R. 5 .....,.....	223,000.00
Machinery on Island #2, Sec. 4, Twp. 50, R. 5.....	350,000.00
Concrete foundation and dams, Sec. 4, Twp. 50, Range 5, .....	150,000.00
Railway spur and bridge .....	48,750.00
	<hr/>
	\$2,529,250.00

Later all valuations upon real estate in Kootenai County, including that in controversy, were reduced fifteen per cent by the State Board of Equalization.

Turning now to the evidence, I am inclined to think that the allegation that property generally in the county was assessed at only from thirty to sixty per cent of its actual cash value is not sustained. While it may be conceded that there is sufficient evidence to warrant a strong suspicion that as a rule the assessor did not in fact list property at its

real value, and that he must have known that he was under-valuing it, it is too fragmentary and too meager to justify the court in finding as a fact that the assessor adopted, or that the board of equalization recognized or acquiesced in, a uniform or general system of under-valuation. The objection that separate valuations were placed upon the several parts of the plaintiff's property all of which constitute a single plant, is not seriously urged in the argument, and whatever view may be taken of the propriety of such a method, in itself it does not furnish ground for equitable relief. [561]

Two questions therefore remain for consideration: (1) Were the valuations placed upon the plaintiff's property by the assessor, and confirmed by the board of equalization, excessive? And (2), if so, was such over-valuation the result of such conduct on the part of the assessing officers as to warrant injunctive relief?

Primarily it may be observed that the value of the property in controversy is not susceptible of any absolutely accurate estimate; there is no fixed standard by which it may be measured. Other factors besides the mere cost of machinery, dams, and other artificial structures enter into the calculation, chief of which perhaps is the site, or the natural advantage controlled thereby; also the fact that the property assessed in the defendant county is not a complete unit, but is only a constituent part of a larger system. In view of these considerations, obviously so long as the assessing officers do not act wilfully or maliciously there must be con-

ceded to them a greater discretion or a wider margin of unavoidable error than in cases where the value of the property assessed can be readily referred to a market price for a standard. But it is not to be understood that merely because a proper valuation is accompanied with difficulty and entails considerable labor, officers are relieved from employing means reasonably adequate to enable them to act intelligently.

Three different methods are suggested in the record for reaching the value of property of this character, no one of which, however, is claimed to be infallible or entirely accurate, or even absolutely complete. The first of these is primarily a resort to the original cost of the plant. But whether or not cost furnishes a fair standard in any particular case depends upon a great many contingencies, some of which are easily reduced to definite form, but others of which necessarily [562] remain the subject of considerable conjecture. If the plant is comparatively new, and purchases have been made in the open market, and good judgment has been used in selecting the machinery and in its installation, cost may be a fair measure of the present value, after making reasonable allowance for depreciation, and, of course, assuming that the enterprise as a whole is a reasonably feasible one. From a financial standpoint, the whole project, regardless of the intrinsic value of the physical plant as a means for generating power, may be practically worthless, owing to a lack of demand for the product of unexpected competition which can-

not be met; or, upon the other hand, the value may be greatly in excess of actual cost, owing to a demand which has not been anticipated, and to conditions enabling the owner to charge for the output a price in excess of that which was originally contemplated.

A second method is to ascertain the value of the existing plant by calculating the cost of its reproduction. Such method, however, is obviously only partial, for the reason that necessarily it fails to embrace the present value of the site or natural resource to utilize which the plant was constructed.

The other method suggested is the capitalization, at a fair rate of interest, of the probable net income, after making due allowance for upkeep and depreciation. While dependent upon certain estimates, and subject to certain contingencies, upon the whole I am inclined to the view that this is the most adequate and the safest of the three methods, and I have therefore used it as the basis of the conclusions which I have reached, although not entirely to the exclusion of the other two. In a measure the facts ascertained in an inquiry, into the original cost and into the cost of reproduction throw light upon the calculations involved in this method, and operate as [563] a check against unfounded assumptions which might otherwise be indulged.

Inasmuch as neither the original cost nor the cost of reproduction is to be used as the basis of determining the present value, the evidence under these two heads need not be detailed, nor is it necessary to make a precise finding in response to either in-



quiry. It is sufficient to say that upon credible testimony it appears that the actual cost of the artificial plant, all of which has been constructed within the last six years, was between \$900,000.00 and \$1,000,000.00, and the cost of all of the property embraced within the assessment under consideration, including site, water rights, and all other natural advantages, did not exceed \$1,200,000.00, and was probably more nearly \$1,100,000.00. It further satisfactorily appears that the artificial plant could be reproduced new for substantially what it cost. The site, considered strictly as a site, that is, merely as so many acres of land, apart from its relation to the water in Coeur d'Alene Lake and the Spokane River, has probably not increased in value to any great extent since it was purchased by the plaintiff; there has been no growth or change in local conditions such as would materially affect the value of the land for any other purpose than as controlling the utilization of the water for power purposes. Hence the uncertain, elastic factor in the value of the plant as a whole is primarily that of the natural advantage of water right, to which the land owned by the plaintiff is the key, and apparently there is no means by which the value of this factor can be intelligently estimated except by including it in the plant as a whole, and capitalizing the value thereof by the method already suggested.

[564] The contention is made that for the purposes of taxation the property in controversy should be assessed at only such value as it would have if severed from the general system of which it is a

part, but such a theory is thought to be erroneous. To a degree there is a relation of interdependence between this plant and other plants belonging to the plaintiff, constituting an entire system, and the value of any specific part is not necessarily such value as it would have if the system were dismembered. For many possible reasons a branch railroad might have very little value as an independent concern, although possessing great value as a part of a general system. A common reason is that the overhead charges of independent operation of a small enterprise are wholly out of proportion to the income. Under the theory of the plaintiff it would be necessary to value this plant upon the assumption that it is severed from the Spokane plant, and in the state of Washington it would be necessary to value the Spokane plant upon the assumption that it sustains no relation to this plant, and so with the other parts of the system. The result of such a course would be that the aggregate of all of the several assessed valuations would be considerably less than the value of the whole, considered as a unit. In other words, because of the fortuitous circumstance that its property is situated in more than one revenue district, the plaintiff would pay taxes upon a smaller aggregate valuation than if its entire system were within a single revenue district. There is considerable testimony tending to show that by reason of the impounding of the waters of Coeur d'Alene Lake other parts of the plaintiff's system are greatly benefited during certain months of the year. Upon the record before us, it would

be impracticable to estimate the value of such advantage in dollars and cents, and it is not [565] clear that it would be possible upon any available evidence to reduce such additional value to figures, but while it is intangible I do not think that it can properly be entirely neglected. It is a condition or circumstance of which a contemplating purchaser would take cognizance, and by which he would, to some extent at least, be influenced. So in considering the cost of superintendence or management, it is not thought that it would be just to charge up against the revenues of the Post Falls plant the estimated cost of independent operation; the plant should bear only its fair proportion of the cost of managing the entire system.

With these general observations, we are brought to a consideration of the value of the plant as disclosed by the capitalization of its net income. For the sake of convenience I shall refer to the data contained in Exhibit 18, which is a detailed estimate made and submitted by the witness Cory. His calculations are not substantially unlike those of the witness Wiley, both called as experts on behalf of the plaintiff, and are apparently based upon practically the same assumption of facts. In the first place, the gross revenues of the plant are taken for each of the three years, 1908, 1909 and 1910, as shown by the testimony of other witnesses. This revenue is made up of the actual receipts of the plaintiff for power sold to consumers in Idaho, and a credit at a given rate for the residue of the power not sold to outside consumers, but transmitted to the plaintiff's Spokane

plant and there distributed by it. Against this income an annual charge is made for depreciation, maintenance, operation, taxes, and management. Confessedly the line of demarcation between charges on account of depreciation and charges on account of maintenance is not always clear. So also the classification of expenses of operation and of management are not always free from difficulty; [566] a difference of opinion might very well arise as to whether a given item should go into one of these classes or the other. The witness Cory undertook to define the several terms of classification, but from his testimony as a whole it is obvious that in practice the definitions are often difficult of application. However, we are not here concerned with nice distinctions between terms of classification. There can be no controversy that in ascertaining the net income of the plant allowance should be made for taxes, for the cost of supervision or management, for necessary operating expenses, for maintenance or repairs, and for depreciation. It is only important that the aggregate allowed for all of these purposes shall be sufficient, and only sufficient, to cover all expenses necessarily incident to the operation of the plant, to the end that the gross revenue may be continuously earned and the efficiency and present value of the plant perpetually maintained. So far as concerns the present inquiry, therefore, if we make the proper allowances, it is wholly immaterial whether they be embraced in one class or the other.

#### GROSS REVENUE.

In ascertaining the amount of the gross revenue,

I have followed substantially the calculations contained in Exhibit 18, which I find to be in accordance with the testimony, with the single exception that I make an additional credit to revenue, on account of the power delivered to Martin and Strathern, at the same rate, and with the same deductions for line loss and conversion, as in the case of the power delivered to the plaintiff for its use in Spokane. As shown by these calculations, the aggregate revenue for the years 1908, 1909, and 1910, including credits on account of the Martin and Strathern power is \$984,187.82, or an annual average of \$328,062.60. [567]

#### DEDUCTIONS FOR DEPRECIATION, ETC.

Considering together the actual expense for the years 1908, 1909, and 1910, and the estimates of expert witnesses, in the light of general experience, I find that the following deductions from the gross revenue should be made, averaged for the three named:

##### 1. Property in Kootenai County.

###### Dams.

Depreciation 1% .....	\$ 3,352.82
Maintenance .....	3,000.00

###### Buildings.

Depreciation 2% .....	1,837.84
Maintenance .....	1,500.00

###### Machinery.

Depreciation 4% .....	16,109.52
Maintenance .....	7,500.00

###### Transmission lines.

Depreciation 6% .....	9,600.00
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Maintenance .....	8,000.00
Switching Station.	
Depreciation .....	773.00
Maintenance .....	773.00
Operation .....	8,735.54
Taxes .....	26,001.29
2. Property in Shoshone County.	
Substations.	
Depreciation .....	7,000.00
Maintenance .....	4,000.00
Transmission lines.	
Depreciation 6% .....	10,149.00
Maintenance .....	7,470.66
Taxes .....	2,294.82
Operation .....	3,917.00
3. Property in both counties.	
Management .....	15,000.00
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Total on account of deductions.....	\$137,014.49
Gross revenue .....	\$328,062.60
Gross deductions .....	137,014.49
<hr/>	
Annual net revenues.....	\$191,048.11
Annual net revenue, capitalized at	
the rate of 8% .....	\$2,388,101.37
Property included in this capitalization other than	
that covered by the assessment in controversy:	
[568]	
Shoshone County property, depreciated	
value .....	\$265,585.00
Overflow lands, Kootenai County.....	200,000.00

Pole-lines, Kootenai County .....	183,000.00
Substations at Cataldo, depreciated value .....	20,880.00

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Total.....\$669,465.00

Deducting this amount of \$669,465.00 from the total capitalized value of \$2,388,101.37 leaves \$1,718,-636.37, as the value of the property covered by the assessment under consideration.

Now, a brief explanation of the foregoing calculation as compared with that contained in Exhibit 18. While in the main following the same general course as was pursued by the witness Cory, I have averaged each item of expense or deduction for the three years, instead of making a detailed tabulation for each of the three years and then averaging the yearly totals; the difference in method does not in itself involve any difference in fact or in result; the difference in results is due to the adoption and use of some different and some additional factors.

As to the gross revenues, it is thought that there must be added to the amounts taken into consideration in the exhibit, a reasonable credit for the power delivered to Martin and Strathern. Briefly referring to this feature of the case, it appears that as a partial consideration for a portion of the site of the Post Falls plant the plaintiff entered into two several contracts with Strathern and Martin, or their predecessors, owners of lands at Post Falls, by which in substance it agreed annually to furnish to Strathern 250 horse-power, and to Martin 125 horse-power, free of charge. In compliance with the terms

of these contracts, during the years 1908, 1909, and 1910, the plaintiff did furnish, at its switchboard, power in an amount on the average for each of these years, which, if credited upon the same terms for which the plaintiff has given credit for the power [569] taken by it and used at Spokane, would have yielded a revenue of \$6,117.53 annually. While in one sense it is apparently true that the plaintiff receives no actual present return from this source, it is clear I think that in ascertaining the taxable value of the plant by capitalizing its net revenue, this item must be credited as a part of the gross income. As already suggested, the right to receive this power was granted to Martin and Strathern by the plaintiff as a part of the consideration for the purchase of the site. True, the obligation to furnish the power is binding upon the plaintiff's successors in interest, and in a sense may be regarded as a charge against, or a lien upon, the land, but the plaintiff is the sole owner of the entire plant and the title thereto, and even if the obligation to furnish the power be held to be a lien upon, or a charge against, the property, the situation is not substantially different from what it would be if, instead of granting this right as a part of the consideration, the plaintiff had executed a *true* deed or mortgage upon the property, and by means thereof borrowed the money, and paid Martin and Strathern in cash for the site. The annual interest upon the mortgage or the trust deed would correspond to the value of the annual use of the 375 horse-power; in either alternative the obligation is against the plant, the only difference being that in

the one case the use of a certain amount of power is credited to the obligee, and in the other case the revenue derived from the use of substantially the same amount of power is paid in the form of interest. Suppose that instead of borrowing money, and paying interest on it, for the purpose of procuring the necessary machinery for the plant, the plaintiff had granted to the vendor of the machinery the perpetual use of a certain amount of power in full payment for the machinery, it would hardly be contended that the revenue-bearing value of such power should not be considered in capitalizing the net revenue of [570] the plant. The defendant county has the right to assess the plant, and the entire plant, at its full cash value, and it is unimportant what obligations the plaintiff may sustain to others in relation thereto, or in relation to the output thereof; we must consider the value of the plant as a whole, in the light of its full revenue-producing capacity. Indeed, even if Strathern and Martin were deemed to be part owners of the plant, or to hold some interest therein, the consideration would be unimportant. It is the taxable value of the plant in its entirety, the amount of taxes which the plant should pay, with which we are concerned, and it is quite immaterial whether the obligation to pay the taxes rests solely upon the plaintiff, or upon it and other persons. I have therefore added to the gross revenues as shown by Exhibit 18 this item of \$6,117.53.

Now, passing to the other side of the account; I have, in the first place, generally reduced the several allowances for depreciation. It would not be prac-

ticable to go into detail, but for the reason for such reduction may be fairly well illustrated by the consideration of a single item. In the exhibit, for instance, there is an allowance for depreciation upon dams, at the rate of two per cent, or \$6,705.64, per annum. This percentage is based upon the assumption that there will be a total depreciation of the dams at the end of the period of fifty years; that they will then be worthless. If, as all of the expert witnesses who testified upon behalf of the plaintiff assume, the life of the dams will be fifty years, this percentage of allowance for depreciation is clearly indefensible. The dams are of concrete, and so far as their physical existence is concerned it is conceded that, if not everlasting, their life is greatly in excess of the fifty years; the fifty-year period is adopted because it is estimated that upon the average and in the long run, by [571] reason of changes in the art, or owing to some other conditions, the structures may become inadequate or unsuitable for use after the lapse of fifty years. Upon this assumption the structures will efficiently serve the purpose for which they were built for the full period. It must be borne in mind that depreciation, as the term is here used, is entirely distinct from maintenance. The dams, including the gates and all the appurtenances thereof, are to be kept in perfect repair, and are to be fully maintained by expenses charged to the maintenance fund, for which adequate provision is made out of the annual revenues. If properly maintained, in the sense in which that term seems to have been used by the expert witnesses, a structure or machine is kept



in operating condition, "so that its working condition will be as nearly as possible one hundred per cent of its original working condition." Now, under these conditions, if two per cent of the cost of the dams were set aside each year for fifty years, and the fund thus created were at all times to lie idle, the percentage of depreciation would obviously be sufficient, and just sufficient, to cover the depreciation, but whatever may be said in support of the rule of "straight line" depreciation, (as it is designated in the record), in its application to machinery, it is thought to be wholly inapplicable to structures like these. It is not the case of a complex system of machinery where the life of one part is much shorter than the life of another, and where therefore it may become necessary after the lapse of a comparatively short period to resort to the depreciation fund for the purpose of replacing worn out or obsolete or inadequate parts, and where consequently there may be no very large accumulation in the depreciation fund. In the case of the dams the contingency is very remote where it would be necessary to draw upon the fund until the expiration of the full period, and therefore in determining the percentage of depreciation which should be [572] allowed, proper place must be given to the consideration that the funds realized from such deductions from year to year may be made fruitful by reinvestment or by bearing interest. If at the end of the specified period the deductions, with proper interest added thereto, aggregate and equal the value of the structure, that is a just allowance. In this view I have

made an allowance of only one per cent instead of two, for depreciation. As already suggested, the other classes of property involved do not present the same considerations, or at least to the same degree, and smaller reductions have been made in the percentages employed in Exhibit 18.

Some slight changes have also been made in the estimates for maintenance, but in the main they are the same. The item covering operation is simply the average of the actual expenses upon that account for the three years under consideration; and the same comment may be made upon the item of taxes. It may, of course, be true that the charge for taxes thus adopted is considerably less than the taxes will necessarily be upon the valuation as it shall be fixed for 1911, and possible for subsequent years, but that may be true of any item, for the reason that the general business conditions of the plaintiff may change from year to year; the gross revenues for 1911 may be very much larger than for any preceding year, for it appears that they have materially increased during the years 1908, 1909, and 1910.

The item of \$773.00, both for the depreciation and for maintenance, appears upon its face to be less than the corresponding item in Exhibit 18, but it is so only because the calculation here made is upon the basis of an average for the three years, whereas the corresponding items in Exhibit 18 appear only in two of the three years; but obviously the general result is the same. [573]

There seems to be some discrepancy between the items shown by Exhibit 18, covering taxes in Sho-

shone County, and the testimony, but there is some confusion in the testimony, and I have adopted as correct the showing made by the exhibit.

The only testimony as to a proper charge for management is based upon the hypothesis of an independent management for the Post Falls plant. The estimated amount, based upon this theory, namely, \$21,400.00, is adopted in the exhibit, but, as already suggested, I am unable to accept this theory. There should be charged against this plant only a fair proportion of the expenses of management for the entire system; what that is is not shown by the evidence, and in the absence of definite information I have adopted \$15,000.00 as being a fair amount to allow upon this account.

The deductions on account of property embraced in the entire system producing the gross revenue, but which is either in Shoshone County, and there taxed, or in Kootenai County, and taxed separately, and hence not embraced in the assessment under consideration, are substantially as set forth in Exhibit 18.

In the exhibit the net revenue has been capitalized upon the basis of ten per cent interest. I have adopted eight per cent, as a reasonable rate. The plaintiff conceding that ordinarily eight per cent would be reasonable, attempts to justify the additional two per cent upon the assumption that the business in which it is engaged is extrahazardous, but in this view I am unable to concur. The evidence shows that in eastern Washington and Northern Idaho the going rate of interest upon farm loans

is approximately eight per cent, and the interest upon other kinds of loans is various. But it must be borne in mind that in all investments, and indeed in the case of farm loans, there is a degree of hazard which is covered by the rate of interest charged. What is ordinarily called interest not only embraces [574] interest in the scientific sense, but also covers the risk of a loss of the principal in whole or in part. It may also be added that there is usually involved in the interest charge on farm loans something for compensation for the service required in making such loans, in supervising them, and in collecting the interest and principal as they become due, and no such service is involved in the interest charge here. It is true that a large part of the plaintiff's output is sold to the mines in North Idaho, and mining is usually regarded as lacking in the stability which characterizes most other classes of business. I put aside the suggestion that by reason of the lack of success of some of the mining enterprises to which power is delivered there are losses, for the reason that the revenue upon which the calculation is made is the revenue actually collected and received by the plaintiff, and does not take account of losses due to the insolvency of the consumers. True, there is some merit in the contention that the life of a mining industry in any community is necessarily uncertain, and that therefore the time may come in the near future when there will be a diminution of demand for the power which is now consumed in the mines of North Idaho. But, conceding this possibility, I am satis-



fied that the peril of an insufficient demand for the plaintiff's output is more fanciful than real. Conditions may, and doubtless will, change in the Coeur d'Alene mines, but no immediate or sudden cessation of activity can be reasonably anticipated; and as the demand decreases for power in mining operations, it seems highly probable that it will increase for other purposes. The resources of the territory in which this plant is located are rich and varied, and only partially developed; the population is small, but growing. With the ever-multiplying uses to which electrical energy is being applied, it is difficult to believe that in such [575] a community there will be a diminution of need. And if appearances are not deceiving, the plaintiff entertains no gloomy view of the future, for, at great expense, it has been acquiring other sites, and is developing other plants. Moreover, the relation of this plant (including the great reservoir which it creates in Lake Coeur d'Alene), to the important market in the city of Spokane for light and power, which the plaintiff supplies and apparently controls, while its value may not be measured in dollars and cents, unquestionably makes a substantial contribution to the stability and safety of the entire investment at Post Falls.

There remains the important question whether or not the conditions are such as to justify an injunction against the enforcement of a tax which is found to be excessive. There is very little in the record tending to support the charge that the assessing officers acted fraudulently or wilfully in overvalu-



ing the property, other than the mere fact of the overvaluation itself. That in 1911 there prevailed some local feeling of unfriendliness, if not of ill will, toward plaintiff, may be fairly inferred, and that one member of the board of equalization was, by reason of his personal controversies with the plaintiff, somewhat prejudiced, is not improbable, but aside from these circumstances there is nothing to impeach the good faith of the officers, unless the assessment, because of the essential unreasonableness, is of itself sufficient to discredit them. But it must be borne in mind that while I have reached the conclusion that \$1,718,636.37 is a fair estimate of the value of the property in 1911, many of the factors involved in the process by which this conclusion was reached are admittedly uncertain, and are in a measure susceptible to an honest [576] difference of opinion. The evidence is extremely meager upon certain features of the case, and with the facts disclosed by the record, supplemented by such other information as he may have acquired in the course of his investigations, Professor Cory, who was brought into the case as a specialist of much learning and experience, hesitated, if he did not wholly decline to express an unqualified opinion as to the actual value of the property, and Mr. Wiley, whose standing as an hydraulic engineer is unquestioned, in testifying upon this phase of the case, answered only a hypothetical question. Keeping in view these conditions of the case, and bearing in mind that a slight decrease in an allowance for depreciation or maintenance or for some other ac-

count, and a small increment of gross revenue, would operate materially to increase the capitalized value, and further bearing in mind that the amount of power sold in 1910 greatly exceeds that sold in 1908, and that apparently the output in 1910 was below the full capacity of the plant, and that the revenue which may be derived from the sale of any additional power will be subject to comparatively small deductions on account of increased expense, it is apparent that upon the record before us reasonable men might reach different conclusions, and that a finding of a value two or three hundred thousand dollars more, or less, than it is herein found to be, could not be set aside for insufficiency of the evidence; and it must be remembered that the assessor and board of equalization were not possessed of much of the information of which we have the benefit. It is therefore thought that if we had nothing but the total or aggregate valuation made by the assessor, it would not be a case in which a court could afford relief against an excessive assessment; of course, if the county officers had had the light which is now shed upon the subject by the evidence before us, a different view might be taken. [577]

But in another aspect of the case, a certain measure of relief may, and properly should, be afforded to plaintiff. As we have seen, the property was not assessed as a whole, but separate valuations were placed upon the several parcels, some of which embrace the lands, and others the improvements thereon. While there is wide room

for a difference of opinion touching the value of the lands, in view of the fact that they control an important power site, the improvements are reasonably susceptible to a just and approximately accurate appraisalment. Assuming that the project is financially feasible, the dams, buildings, and machinery are worth substantially what it would cost to replace them. A competent engineer could, without great labor or expense of time, have informed himself sufficiently to give to the county officers a reasonably close estimate of the probable cost of reproducing the plant, and more especially the dam; or the plaintiff could have been called upon to produce its books of account disclosing the original cost thereof. Neither course was pursued, and admittedly no intelligent effort was made to ascertain the value. The assessor testifies that he recommended to the county commissioners the employment of competent engineers, but the recommendation was for some reason not acted upon, and, the time for assessment being about to expire, he, the assessor, wholly without training or experience qualifying him to make an intelligent estimate, adopted the valuations hereinbefore set forth; of necessity they were mere guesses. The three dams in the aggregate are assessed at \$712,500.00. From the evidence it quite conclusively appears that they could be reproduced new for less than half of that amount. The exact figures given by Mr. Wiley are \$326,271.00, so that the difference between the assessed value and what I am inclined to think should be held to be the actual value is [578] \$386,229.00.

While he was upon the witness stand the assessor attempted to justify the valuation upon the ground that the dams contributed to a conservation of the water in Coeur d'Alene Lake as a reservoir, but the value of the site,—the value of the natural advantage controlled by the plaintiff through its ownership of the site,—pertains to the land, and is embraced within the assessment upon the land. The legal status of the dam for assessment purposes is like that of a dwelling-house or business building upon a city lot. The lot may have a value because of its location, but the location contributes nothing to the value of the building, considered apart from the lot. While here the assessments upon the artificial structures and machinery, other than the dams and the railroad track and bridge, are not in all cases intelligently made, their aggregate bears some relation to the actual value of the property, and they should not be interfered with; but the over valuations upon the dams and railway track are so gross, and the manner of making them was so unreasonable, that it is thought the plaintiff is entitled to protection against the collection of the excess tax. The railway spur and bridge, costing less than \$20,000.00, are assessed at \$48,750. The over-valuation on the dams is confined to the item "Bear-trap dam and small dam at Post Falls, \$562,500.00"; there is no over-valuation upon the middle dam. The total excess valuation on the dams, namely, \$386,229.00, should therefore be deducted from the item of \$562,500.00, and accordingly this item will be reduced to \$176,271.00. There will also



be deducted from the item of \$48,750.00, for railway spur and bridge, \$28,954.61, leaving \$19,795.39, the original cost of the structures, as the corrected valuation. [579]

With the exception of the reduction in these two items, the relief prayed for by the plaintiff will be denied. While it is realized that such a decree may not do exact justice between the parties, it is not impossible that the plaintiff's assessment, as modified, is not more equal than that of many other taxpayers in the county. In the main the administration of the revenue laws must be left to the honesty, intelligence and fairness of the administrative officers, and ordinary inequalities cannot be corrected by the courts. If I rightly construe the complaint, the plaintiff has the benefit of a 15 per cent reduction made by the State Board upon the real estate valuations, so that, with the modifications herein provided for, the net valuation upon which it must pay taxes is not greatly in excess of the actual value of its property. As already intimated, there may be an inequality due to the under-valuation of other property in the county, but in the absence of more complete proofs, the extent of such discrimination cannot be determined.

The solicitors for the complainant are directed to prepare a decree in accordance with the foregoing views, without unnecessary delay, and after submitting it for approval to opposing counsel, they may transmit it to me, in care of the Clerk of the Circuit Court of Appeals, at San Francisco.



Endorsed]: Filed February 24, 1913. A. L. Richardson, Clerk. [580]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho.

Defendants.

**Decree.**

This cause came on to be heard at a previous stated term and was argued by counsel, and thereupon, upon consideration thereof, it is

ORDERED, ADJUDGED AND DECREED, that, inclusive of penalties and interest to the date hereof, there is due from the plaintiff to the defendant county, on account of taxes in said county for the year 1911, upon the plaintiff's property situate in Kootenai County, Idaho, and described in the complaint, a balance of \$12,685.00 (\$20,000.00 having heretofore been paid); that the plaintiff shall pay, and the defendant shall receive and accept said balance, with interest thereon from the date hereof at the rate of seven per cent per annum, in full payment and satisfaction for such taxes, and the said taxes shall thereupon be satisfied of record, and the defendants and each of them and their successors be

perpetually enjoined from selling the property of the plaintiff described in the bill of complaint for and on account of said taxes or attempting in any manner to collect any further sum on account of said taxes. The temporary injunction heretofore issued herein and now existing shall terminate upon and no [581] longer be effective after May 26, 1913. Neither party is given costs.

Dated this tenth day of May, 1913.

FRANK S. DIETRICH,

Judge.

[Endorsed]: Filed May 10, 1913. A. L. Richardson, Clerk. [582]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho.

Defendants.

**Order [Continuing Injunction].**

The injunction heretofore issued in this case and by the final decree herein continued in effect until May 26, 1913, is hereby continued in effect to

and including the 28th day of May, 1913.

This order is made upon the consent of the parties in open court.

Dated this 26th day of May, 1913.

FRANK S. DIETRICH,

Judge.

[Endorsed]: Filed May 26th, 1913. A. L. Richardson, Clerk. [583]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Petition for Order Allowing Appeal and Order Con-  
tinuing Injunction During the Pendency of the  
Appeal.**

To the Honorable the Judge of the United States  
District Court for the District of Idaho, North-  
ern Division:

The above-named complainant, The Washington  
Water Power Company, feeling itself aggrieved by  
the decree made and entered in the above-entitled court

in the above-entitled cause on the 10th day of May, 1913, being the decree on the merits herein, hereby prays for the allowance of an appeal from said decree and from each and every part thereof to the United States Circuit Court of Appeals for the Ninth Circuit, for the reasons set forth in the assignment of errors annexed hereto and which is filed herewith, and that a transcript of the record and proceedings upon which said decree was rendered may be sent, duly authenticated to the said Circuit Court of Appeals, under and according to the laws of the United States in such case made and provided, and complainant further prays the Court for an order continuing the injunction heretofore granted by the Court during the pendency of the appeal; restraining and enjoining the defendants from the sale of the property of the complainant for taxes for the year 1911, said order to be made on such terms [584] as to bonds or otherwise as the Court may consider proper for the security of the defendants, and that such order continue the said injunction upon said appeal either in said Circuit Court of Appeals or in the United States Supreme Court, and the complainant hereby offers to execute such bond, with good and sufficient surety, which may be required by the Court in the premises.

F. T. POST,  
JOHN P. GRAY,

Solicitors for the Complainant.

Service of the petition for order allowing appeal and for order continuing injunction pending appeal

is hereby acknowledged this — day of May, 1913.

\_\_\_\_\_,  
\_\_\_\_\_,

Solicitors for Defendants.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk, [585]

\_\_\_\_\_  
*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COMPANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Assignment of Errors.**

Comes now the complainant, and files the following assignment of errors upon which it will rely upon its appeal from the decree made by this Honorable Court, on the 10th day of May, 1913, in the above-entitled cause, and the said complainant says that the said decree in said cause is erroneous and against the just rights of the complainant for the following reasons:

I.

The Court erred in finding and holding that the



value of the property of the complainant exceeded in value the sum of \$1,018,742.75.

## II.

For the reason that the evidence showed that the property of the complainant did not exceed in value the sum of \$1,018,742.75, and the Court erred in holding that the same had any value in excess of the sum of \$1,018,742.75.

## III.

The Court erred in adopting the sum of eight per cent as a reasonable rate of return and in taking any sum less than the sum of 10% and in not adopting the said sum of 10% as a return upon said investment. [586]

## IV.

For the reason that the evidence showed that the business in which the complainant is engaged is an extrahazardous one; that the largest part of the revenue from said power plant of the complainant comes from the transmission of electricity to a mining district approximately one hundred miles away; that the business of mining is hazardous, and for the reason that the ordinary rate of interest on farm loans in the country adjacent to the property of the complainant is 8%, and the going rate of interest from 8% to 10%, and that a reasonable rate of return upon the investment of complainant is 10%.

## V.

The Court erred in taking into consideration the fact that the complainant owned other power sites in the State of Washington in arriving at the value of the real estate and power site of the complainant

and in taking into consideration anything other than the value of the plant of the complainant, and in fixing its cash value at the amount which that plant would be taken at in payment of a just debt due from a solvent debtor.

VI.

The Court erred in taking into consideration the possible benefit to certain property owned by the complainant in the State of Washington, arising from the ownership by complainant of the controlling works at Post Falls, in fixing the valuation of the property of complainant.

VII.

The Court erred in holding that the proof of the complainant does not make out a case of clear and hostile discrimination against the complainant such as would justify an injunction in the case, against the collection of any portion of the taxes complained of. [587]

VIII.

The Court should have granted the injunction against the collection of the taxes sought to be enjoined herein on the ground that they are not uniform with the tax upon all other property subject to taxation within territorial limits of Kootenai County, Idaho, and on the further ground that the payment of such taxes on complainant's property would be the payment of a higher rate of taxation than is required to be paid by other property holders within said county, and the Court erred in declining to so hold.

## IX.

For the reason that the Court found as a fact based upon the earnings of the plant as allowed by the Court, upon the depreciation as allowed by the Court and other items as found by the Court, that the value of the plant did not exceed the sum of \$1,718,636.37, and that that sum represented the value of the property covered by the assessment under consideration, and then declined to give the complainant the benefit of such finding, but permitted the assessment complained of to stand as the value of the said property, and allowed no deductions from the assessment made by the said assessor, except a reduction from the assessed valuations on the dams of \$386,229, and of \$28,954.61 from the assessed valuation of a railroad spur and bridge.

## X.

For the reason that even under the facts as found by the Court, the valuation of the property under consideration could not and should not have been fixed at any sum in excess of the sum of \$1,718,636.37. [588]

## XI.

The Court erred in making an additional credit to the revenue of the electric power plant of the complainant on account of power delivered to Martin and Strathern, and in holding that such power should be credited to the revenue of the said plant.

## XII.

Because the evidence showed that Martin and Strathern conveyed certain lands situated adjacent to the present power site of the complainant in con-

sideration that the complainant and its successors in interest should furnish to the said Strathern and Martin a given amount of electrical horse-power perpetually, and the interest of the said Martin and Strathern are taxable and have been taxed separately, and the complainant should be credited therewith.

### XIII.

The Court erred in allowing only one per cent depreciation for the dams of the complainant and in failing to allow, in arriving at the value of the property, two per cent per annum for depreciation.

### XIV.

The evidence showed that the sum of two per cent per annum should be allowed for depreciation upon the dams and that any sum less than that would be unreasonable and unfair to the complainant.

### XV.

The Court erred in allowing only the sum of \$15,000 as a fair and proper charge for management, and in not allowing the sum of \$21,400. [589]

### XVI.

For the reason that the evidence showed that the sum of \$21,400 was a reasonable and proper charge for the management and that the said sum of \$21,400 was really less than the plant actually was or could be managed for.

### XVII.

The Court erred in permitting the valuation of \$19,795.39, the original cost of a railroad spur and bridge, to remain as the assessed valuation thereof, whereas, the testimony showed that the structure

was simply put in for construction purposes and was not of a value in excess of \$4,500.

XVIII.

For the reason that the Court erred in not enjoining the collection against the complainant of any sum of taxes in excess of the amount heretofore paid under the direction of the Court, and in entering judgment against the complainant for the sum of \$12,685.

XIX.

For the reason that the Court erred in not reducing the valuation for assessment purposes of the real estate of the complainant from the sum of \$1,195,000 to the sum of \$97,986.40.

XX.

For the reason that the Court erred in not reducing the valuation upon the machinery of the complainant from the sum of \$350,000 to the sum of \$313,236.

XXI.

For the reason that the Court erred in not reducing the valuation upon the railroad spur and bridge of the complainant from the sum of \$48,750 to the sum of \$4,500. [590]

XXII.

The Court erred in not entering a perpetual injunction in favor of the complainant and against the defendants as prayed for.

XXIII.

The Court erred in refusing to enjoin and restrain the collection of the taxes complained of upon the property of the complainant.



XXIV.

The Court erred in including in its decree any penalties against complainant for failure to pay the taxes assessed against the property referred to in the bill.

F. T. POST,  
JOHN P. GRAY,  
Attorneys for Complainant.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk. [591]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho.

Defendants.

**Order Allowing Appeal.**

The above-named complainant, The Washington Water Power Company, feeling itself aggrieved by the decree and judgment entered in the above-entitled suit on the 10th day of May, 1913, doth hereby appeal from said decree and judgment to the United States Circuit Court of Appeals for the Ninth Cir-

cuit, and hereby prays that its appeal be allowed and that a transcript of the records and proceedings therein upon which said decree was made, duly authenticated, may be sent to the said United States Circuit Court of Appeals for review.

F. T. POST,

JOHN P. GRAY,

Solicitors for Complainant.

And now, on this 28th day of May, 1913, it is

ORDERED that the appeal prayed for is hereby allowed, the amount of the bond upon appeal be and the same is hereby fixed in the sum of \$1,000, and further proceedings in this court be stayed pending said appeal.

FRANK S. DIETRICH,

Judge.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk. [592]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

### Order Continuing Injunction.

The complainant in the above-entitled cause having served and filed a petition for an order allowing an appeal from the decree in said cause to the United States Circuit Court of Appeals for the Ninth Circuit, and for an order continuing the injunction heretofore issued, notwithstanding the entry of said final decree, until the final disposition of said cause upon said appeal, and having given notice of the said application before this Court, which notice has been served upon the defendants, and the complainant and defendants having all appeared by counsel in response to said notice, and the Court being fully advised in the premises, and being of the opinion that the *status quo* of the property pending such appeal be maintained,

IT IS HEREBY ORDERED that the injunction heretofore issued in the above-entitled cause be, and the same hereby is, continued in force until the final disposition of said cause upon appeal in the said United States Circuit Court of Appeals for the Ninth Circuit or in the United States Supreme Court. This order shall be conditional upon the complainant filing within ten days after the signing of this order a good and sufficient bond, with surety or sureties to be approved by the Court or Clerk of this court, to the defendants in the penal sum of \$15,000.00, conditioned [593] upon the payment of the sum of \$12,685.00 found to be due to the defendant herein by the said decree, together with interest thereon, or such portion or part thereof as may be found due

upon the final disposition of said cause; interest to be calculated at the rate of seven per cent per annum to the date hereof, and thereafter at the rate of ten per cent per annum. And the stay is further conditioned upon the immediate filing herein of a stipulation by the plaintiff consenting that, subject to the approval of the Circuit Court of Appeals, the appeal may be docketed and heard at any place in the Circuit where said court convenes, to be designated by the defendant, at its option.

Dated May 27th, 1913.

FRANK S. DIETRICH,

Judge.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk. [594]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Bond on Appeal.**

KNOW ALL MEN BY THESE PRESENTS,

That we, The Washington Water Power Company, a corporation, as principal, and Fidelity and Deposit Company of Maryland, as surety, are held and firmly bound unto Kootenai County, State of Idaho, a municipal corporation, and Fred E. Wonnacott, as assessor and *ex-officio* Tax Collector of Kootenai County, Idaho, and his successor and successors in office, defendants in the above-entitled cause in the sum of \$1,000, lawful money of the United States, for the payment of which well and truly to be made we hereby bind ourselves and each of our successors and assigns, jointly and severally by these presents.

Sealed with our seals and dated this 26th day of May, 1913.

WHEREAS, on the 10th day of May, 1913, a decree and judgment was entered in the above-entitled cause in the court aforesaid, in favor of the defendants and against the complainant, and the said complainant, The Washington Water Power Company, is prosecuting an appeal therefrom to the United States Circuit Court of Appeals for the Ninth Circuit, [595]

NOW, THEREFORE, the condition of this obligation is such that if the above-named complainant, The Washington Water Power Company, shall prosecute the same to effect, and answer all costs and damages that may be awarded against it, if it fails to make its appeal good, then this obligation shall be void; otherwise the same shall be and remain



in full force and effect.

THE WASHINGTON WATER POWER  
COMPANY,

By JOHN P. GRAY,

Its Attorney and Agent.

FIDELITY & DEPOSIT COMPANY OF  
MARYLAND.

[Corporate Seal]

By ROBERT H. ELDER,

Attorney in Fact.

O. W. CHAMBERLIN,

Agent. [596]

State of Idaho,

County of Kootenai,—ss.

Robert H. Elder, being first duly sworn, on his oath deposes and says:

That he is the attorney in fact of Fidelity and Deposit Company of Maryland, the corporation that executed the foregoing bond as surety, and was authorized to execute said bond on behalf and in the name of said corporation. That the said corporation is authorized by virtue of a full compliance with the laws of the State of Idaho to do business in said State and to execute this bond, and the said corporation is worth the sum of \$2,000 in property not exempt from execution.

ROBT. H. ELDER.

Subscribed and sworn to before me this 26th day of May, 1913.

[Seal]

ALBERT V. CHAMBERLIN,

Notary Public.

The foregoing bond is approved both as to form and sufficiency of surety this 28th day of May, 1913.

FRANK S. DIETRICH,

Judge.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk. [597]

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*In the United States Circuit Court of Appeals for  
the Ninth Circuit.*

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Stipulation [Re Docketing and Hearing of Case in  
Appellate Court].**

The complainant in the above-entitled action in order to comply with the condition of that certain order dated May 27, 1913, made by Frank S. Dietrich, Judge of the District Court of the United States for the District of Idaho, Northern Division, in the above-entitled cause continuing the injunction theretofore issued in said cause pending final disposition thereof, does hereby consent that subject to the approval of the United States Circuit Court of Appeals the appeal in the above-entitled action may be doc-

keted and heard at any place in the Ninth Circuit where said court convenes, to be designated by the defendants at their option.

THE WASHINGTON WATER POWER  
COMPANY.

By JOHN P. GRAY.  
JOHN P. GRAY,  
F. T. POST,

Attorneys for Complainant.

The foregoing consent and stipulation is hereby approved as to form and sufficiently complies with the provisions of the order made by me dated May 27, 1913.

FRANK S. DIETRICH,  
Judge.

[Endorsed]: Filed May 28, 1913. A. L. Richardson, Clerk. [598]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

### **Undertaking on Appeal.**

KNOW ALL MEN BY THESE PRESENTS, That THE WASHINGTON WATER POWER COMPANY, a corporation, as principal, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, a corporation, as surety are held and firmly bound unto the County of Kootenai, a municipal corporation of the State of Idaho, in the sum of \$15,000, to be paid to the said Kootenai County, for the payment of which well and truly to be made, we bind ourselves and each of us, and our and each of our successors and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 3d day of June, 1913.

WHEREAS, the above-named plaintiff, The Washington Water Power Company, has prosecuted an appeal to the United States Circuit Court of Appeals for the Ninth Circuit to reverse the decree rendered in the above-entitled action in the District Court of the United States for the District of Idaho, Northern Division, which judgment was dated May —, 1913.

NOW, THEREFORE, the condition of this obligation is such that if the above-named, The Washington Water Power Company, shall prosecute said appeal from said final decree to effect and shall pay unto Kootenai County the amount of said judgment [599] namely, the sum of \$12,685, together with interest thereon, or such portion or part thereof as may be found due upon the final disposition of said

cause, interested to be calculated at the rate of 7% per annum to the 27th day of May, 1913, and thereafter at the *date* of 10% per annum, then this obligation shall be void; otherwise it shall be and remain in full force and virtue.

THE WASHINGTON WATER POWER  
COMPANY.

By JOHN P. GRAY,

Its Attorney.

FIDELITY AND DEPOSIT COMPANY  
OF MARYLAND,

[Corporate Seal]

By ROBT. H. ELDER,

Its Attorney in Fact.

O. W. CHAMBERLIN,

Agent. [600]

State of Idaho,

County of Kootenai,—ss.

Robert H. Elder, being first duly sworn, on his oath deposes and says:

That he is Attorney in Fact of Fidelity and Deposit Company of Maryland, the foregoing surety, and is authorized to execute said instrument for and on behalf of said company; that the said company is authorized to execute fiduciary and surety bonds within the State of Idaho and to act as surety therefor by virtue of a full compliance with all of the laws of the State of Idaho relating to surety companies doing business therein.

ROBERT H. ELDER.



Subscribed and sworn to before me this 3d day of May, 1913.

[Seal]                      ALBERT V. CHAMBERLIN.

Approved June 5/13.

DIETRICH,  
Judge.

[Endorsed]: Filed June 5, 1913. A. L. Richardson, Clerk. [601]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Order [Directing Transmission of Original Exhibits,  
etc., to Appellate Court].**

Upon motion of counsel for complainant, it is hereby

ORDERED that the Clerk of the above-entitled court be authorized to transmit the original exhibits, maps and photographs used upon the trial of this cause to the United States Circuit Court of Appeals for the Ninth Circuit at San Francisco, California,

668 *The Washington Water Power Company vs.*  
the same to be used on argument of said cause upon  
appeal.

FRANK S. DIETRICH,  
Judge.

[Endorsed]: Filed May 28, 1913. A. L. Richardson,  
Clerk. [602]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Stipulation [for Order Extending Time to Docket  
Case, etc., in Appellate Court to July 24, 1913].**

IT IS HEREBY STIPULATED that if neces-  
sary for the clerk, an order may be made extending  
the time to docket this cause and file the transcript  
in the United States Circuit Court of Appeals to and  
including the 24th day of July, 1913.

JOHN P. GRAY,

Attorney for Plaintiff.

N. D. WERNETTE,

Attorney for Defendants.

[Endorsed]: Filed June 14, 1913. A. L. Richardson, Clerk. [603]

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Stipulation Extending Time [to August 26, 1913, to  
Docket Cause in Appellate Court].**

IT IS HEREBY STIPULATED AND  
AGREED by and between the parties to the above-  
entitled action that the time of the complainant and  
appellant, The Washington Water Power Company,  
to file its record on appeal in the above-entitled  
action in the United States Circuit Court of Appeals  
for the Ninth Circuit, shall be and hereby is extended  
to and including the 26th day of August, 1913, and  
the Judge of the above-entitled court is asked upon  
this stipulation to make an order so extending the  
same.

Dated this 15th day of July, 1913.

JOHN P. GRAY.

Attorney for Complainant.

N. D. WERNETTE,

Attorney for Defendants.

[Endorsed]: Filed July 19, 1913. A. L. Richardson, Clerk. [604]

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*In the United States Circuit Court of Appeals,  
Ninth Circuit.*

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,  
Complainant and Appellant,  
vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,  
Defendants and Respondents.

**Praeipie for Transcript.**

To A. L. Richardson, Clerk of the Above-entitled  
Court:

You will please prepare transcript of the complete record in the above-entitled cause to be filed in the office of the United States Circuit Court of Appeals for the Ninth Circuit, under the appeal perfected to said court, and include in said transcript the following pleadings, proceedings, papers, records and files, to wit:

Complaint, demurrer to complaint, order overruling demurrer to complaint, answer, replication, exhibits introduced upon the trial of said action and received in evidence, opinion of the court, decree and judgment, petition for appeal and for order continuing injunction, assignment of error, order allow-

ing appeal, order continuing injunction, undertaking and bond on appeal, stipulation that appeal may be docketed and heard at any place in Ninth Circuit where United States Circuit Court of Appeals convenes, to be designated by defendants, and order thereon, citation, supersedeas bond, order for transmissal of Exhibits, stipulation extending time to file transcript, stipulation for settlement of statement of evidence, order settling [605] statement of evidence, and any and all other record entries, pleadings, proceedings, papers and files necessary and proper to make a complete record upon said appeal in said cause.

Said transcript to be prepared as required by law and the rules of this court and the rules of the United States Circuit Court of Appeals for the Ninth Circuit.

JOHN P. GRAY,

Attorney for The Washington Water Power Company, Appellant, Residence and P. O. Address, Coeur d'Alene, Idaho.

[Endorsed]: Filed July 25, 1913. A. L. Richardson, Clerk. [606]



*In the District Court of the United States for the  
District of Idaho, Northern Division.*

No. 535.

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WANNACOTT, as Assessor  
and Ex-officio Tax Collector of Kootenai  
County, Idaho,

Defendants.

**Citation [on Appeal].**

United States of America,—ss.

To Kootenai County, a Municipal Corporation, and  
Fred E. Wannacott, as Assessor and *Ex-officio*  
Tax Collector of Kootenai County, Idaho, and  
to His Successor and Successors:

You and each of you are hereby cited and admon-  
ished to be and appear at a term of the United  
States Circuit Court of Appeals for the Ninth Cir-  
cuit to be holden in the city of San Francisco, State  
of California, on the 26th day of June, 1913, at 10  
o'clock of said day, pursuant to an appeal filed in the  
Clerk's office of the District Court of the United  
States for the District of Idaho, Northern Division,  
wherein The Washington Water Power Company is  
complainant and appellant and you are defendants  
and respondents, to show cause, if any there be, why  
said decree entered in the above-entitled court and

cause on the 10th day of May, 1913, being the decree upon the merits in said cause, should not be reversed and set aside and speedy justice done to the parties [607] in that behalf.

WITNESS the Honorable EDWARD DOUGLAS WHITE, Chief Justice of the United States, this 29th day of May, 1913.

FRANK S. DIETRICH,  
Judge.

[Seal] Attest: A. L. RICHARDSON,  
Clerk.

Service of the foregoing notice and citation admitted this 29th day of May, 1913.

N. D. WERNETTE,  
ROBT. H. ELDER,

Solicitors for Defendants. [608]

[Endorsed]: No. 535. In the District Court of the United States, for the District of Idaho, Northern Division. The Wash. Water Power Co., Complainant, vs. Kootenai County et al., Defendants. Citation. Filed May 29, 1913. A. L. Richardson, Clerk. [609]

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**Return to Record.**

And thereupon it is ordered by the Court that a transcript of the record and proceedings in the cause aforesaid, together with all things thereunto relating, be transmitted to the said United States Circuit Court of Appeals for the Ninth Circuit, and the same is transmitted accordingly.

[Seal] Attest: A. L. RICHARDSON,  
Clerk. [610]

**[Certificate of Clerk U. S. District Court to  
Transcript on Appeal.]**

*In the District Court of the United States for the  
District of Idaho, Northern Division.*

WASHINGTON WATER POWER COMPANY, a  
Corporation,

Appellant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and FRED E. WONNOCOTT, as Assessor  
County, Idaho,

Appellee.

I, A. L. Richardson, Clerk of the District Court of the United States for the District of Idaho, do hereby certify the foregoing transcript of pages, numbered from 1 to 611, inclusive, to be full, true and correct copies of the pleadings and proceedings in the above-entitled cause, and that the same together constitute the transcript of the record herein upon appeal to the United States Circuit Court of Appeals for the Ninth Circuit, in accordance with Praeceptum for Transcript, on file in said cause.

I further certify that the cost of the record herein amounts to the sum of \$366.20, and that the same has been paid by the appellant.

Witness my hand and the seal of said Court affixed at Boise, Idaho, this 31st day of July, 1913.

[Seal]

A. L. RICHARDSON,

Clerk. [611]

[Endorsed]: No. 2302. United States Circuit Court of Appeals for the Ninth Circuit. The Washington Water Power Company, a Corporation, Appellant, vs. Kootenai County, a Municipal Corporation, and Fred E. Wannacott, as Assessor and *Ex-Officio* Tax Collector of Kootenai County, Idaho, and His Successor and Successors, Appellees. Transcript of Record. Upon Appeal from the United States District Court for the District of Idaho, Northern Division.

Filed August 11, 1913.

F. D. MONCKTON,

Clerk of the United States Circuit Court of Appeals  
for the Ninth Circuit.

By Meredith Sawyer,  
Deputy Clerk.

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*In the District Court of the United States for the  
District of Idaho, Northern Division.*

THE WASHINGTON WATER POWER COM-  
PANY, a Corporation,

Plaintiff,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and *Ex-Officio* Tax Collector of Kootenai  
County, Idaho,

Defendants.

Order [Enlarging Time to July 24, 1913, to Docket  
Case and File Record in Appellate Court].

It appearing to the Court that the statement on

appeal has not yet been settled and filed in the above-entitled cause and in accordance with Stipulation on file, it is hereby ordered that the time to docket this cause and file the same in the United States Circuit Court of Appeals for the Ninth Circuit be and the same is hereby enlarged and extended to and including the 24th day of July, 1913.

Dated this 23d day of June, 1913.

FRANK S. DIETRICH,

Judge.

[Endorsed]: No. 535. U. S. District Court, District of Idaho, Northern Division. The Washington Water Power Company, a Corporation, Plaintiff, vs. Kootenai County, a Municipal Corporation, and Fred E. Wonnacott, as Assessor and *Ex-Officio* Tax Collector of Kootenai County, Idaho, Defendants. Order Extending Time. Filed Jun. 26, 1913. F. D. Monckton, Clerk.

*In the District Court of the United States for the  
District of Idaho, Northern Division.*

THE WASHINGTON WATER POWER COMPANY, a Corporation,

Complainant,

vs.

KOOTENAI COUNTY, a Municipal Corporation,  
and FRED E. WONNACOTT, as Assessor  
and Ex-Officio Tax Collector of Kootenai  
County, Idaho,

Defendants.



**Order [Enlarging Time to August 26, 1913, to Docket Case and File Record in Appellate Court].**

On stipulation of the parties to the above-entitled action and good cause appearing therefor, it is

ORDERED that the complainant and appellant shall have and is hereby given to and including the 26th day of August, 1913, to lodge and file its record on appeal in the United States Circuit Court of Appeals for the Ninth Circuit in the above-entitled action.

Dated July 19th, 1913.

FRANK S. DIETRICH,  
Judge.

[Endorsed]: No. 535. In the District Court of the United States for the District of Idaho, Northern Division. The Wash. Water Power Co., Plaintiff, vs. Kootenai County et al., Defendants. Order.

No. ——. United States Circuit Court of Appeals for the Ninth Circuit. Order Under Rule 16 Enlarging Time to Aug. 26, 1913, to File Record thereof and to Docket Case. Filed Jul. 21, 1913. F. D. Monckton, Clerk.

No. 2302. United States Circuit Court of Appeals for the Ninth Circuit. Two Orders Under Rule 16 Enlarging Time to ——— to File Record thereof and to Docket Case. Re-filed Aug. 11, 1913. F. D. Monckton, Clerk.

